

1992

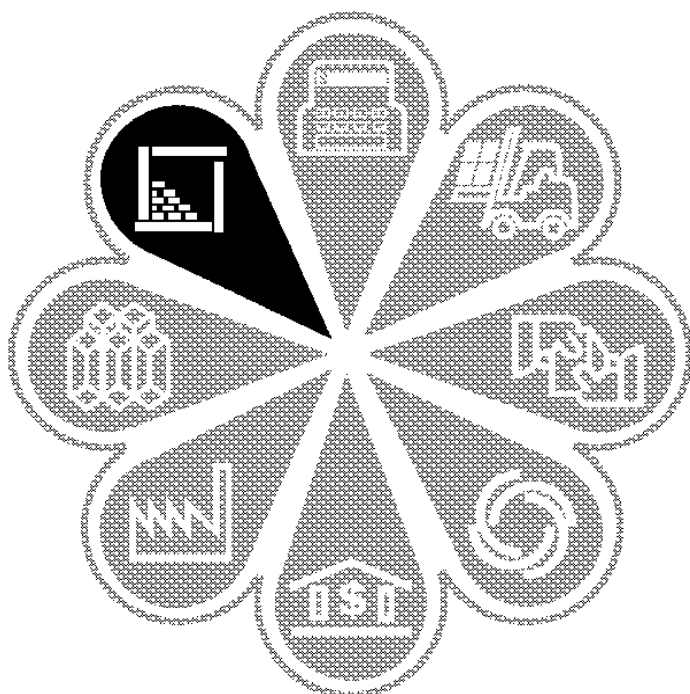
Census of Construction Industries

CC92-A-1

GEOGRAPHIC AREA SERIES

New England States

Connecticut, Maine, Massachusetts,
New Hampshire, Rhode Island, Vermont



Acknowledgments

Many persons participated in the various activities of the 1992 Census of Construction Industries. The overall planning and review of the census operations were performed by the Economic Census Staff of the Economic Planning and Coordination Division.

This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Tamara A. Cole**, **Jennifer L. Evans**, **Susan L. Hostetter**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke** and **Michael E. Kornbau**. The Systems Support Staff maintained the small computers and assisted in the management of computer output.

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If you have any questions concerning the statistics in this report, call 301-457-4680.

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Issued April 1996



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

IV INTRODUCTION

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

CONSTRUCTION—GEOGRAPHIC AREA SERIES

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Assets and depreciation (gross book value):					
Beginning of year—buildings, machinery, and equipment	4				
End of year—total	2, 4	2	6	7	
End of year—buildings, machinery, and equipment	4				
Depreciation charges during year—buildings, machinery, and equipment	4				
Capital expenditures:					
Total capital expenditures	2, 4	2	6	7	11
New buildings—machinery and equipment	4				
Used buildings—machinery and equipment	4				
Communication services, costs for	3				
Employees:					
All employees—average number	1, 2, 3	2	6	7	11
Construction workers—average number	2, 3, 9	2, 9			
Construction workers—quarterly	3, 9	9			
Other employees—average number	3				
Other employees—quarterly	3				
Establishments:					
Number in business during year:					
All	1				
With payroll	1, 2, 3, 5, 9	2, 9	6	7	11
Without payroll	1				
Fringe benefits—legally required and voluntary expenditures	3				
Inventories	5				
Materials, components, supplies, and fuels—costs for	2, 3	2	6	7	11
Ownership—private or government owned	3				
Payroll:					
First-quarter, all employees	3				
Annual:					
All employees	2, 3	2	6	7	11
Construction workers	2, 3	2			
Other employees	3				
Power, fuels, and lubricants—costs for	3				
Proprietors and working partners:					
All establishments	1				
Establishments with payroll	1, 3				
Establishments without payroll	1				
Ratios, selected industry	10	10			
Receipts and value:					
Dollar value of business done:					
All establishments	1				
Establishments with payroll	1, 3		6	7	
Establishments without payroll	1				
Value of construction work, total	2, 3, 5, 8	2	6	7	11
For work subcontracted in from others	2, 3	2			
Other business receipts	3				

See footnotes at end of table.

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Receipts and value:—Con.					
Net value of construction work.	2, 3	2	6	7	11
Value added.	2, 3	2	6	7	11
Rental costs:					
Total.	2, 3	2	6	7	
For machinery and equipment.	3				
For buildings.	3				
Repairs to buildings and other structures.	3				
Repairs to machinery and equipment.	3				
Subcontract work to others, costs for.	2, 3	2	6	7	11
Type and class of construction ²	8				

Note: Data for 1987 and earlier years are also available in some of these tables.

¹CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan statistical area.

²Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.



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Statistics for Establishments With Payroll

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Connecticut. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 29,958 establishments in this State operating in the construction industries. These establishments accounted for \$8.1 billion in total dollar value of business done.

Most of the 29,958 construction establishments were small. Of the total, 21,130 were nonemployers, and over half of the employer establishments had less than 5 employees. The 2,777 construction establishments with 5 employees or more, while representing only 9 percent of all establishments, accounted for more than 75 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$7.3 billion in total dollar value of business done. Of this amount, \$7.1 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.8 billion, leaving net value of construction work of \$5.4 billion. In addition, these establishments paid out \$2.3 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$3.4 billion. (See Introduction and appendixes for explanation of terms.)

There were 8,828 establishments with total employment averaging 55,314 during the year. Total payroll for 1992 was \$1.7 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 21,130 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$870 million. Most of these establishments, about 84 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

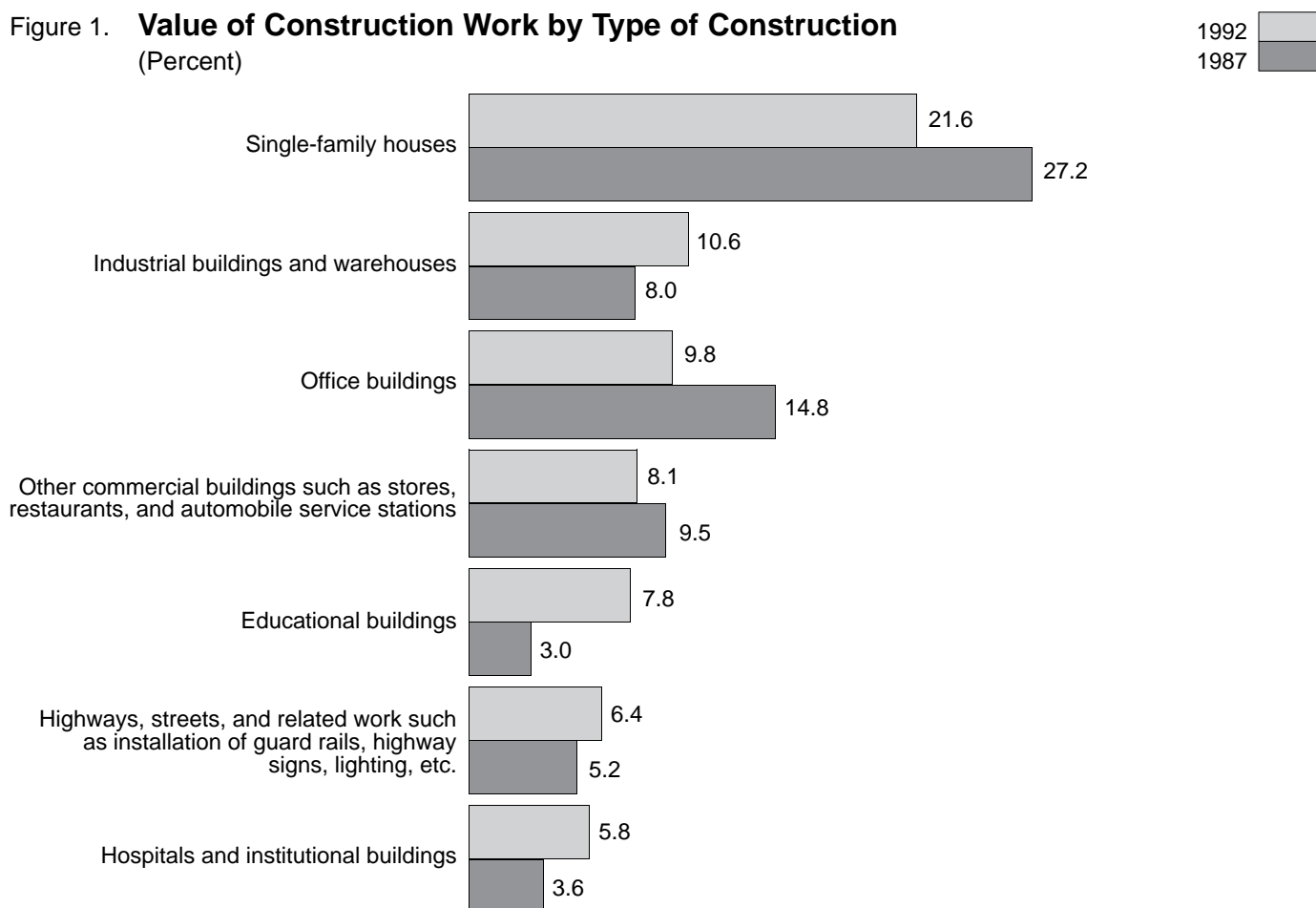


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

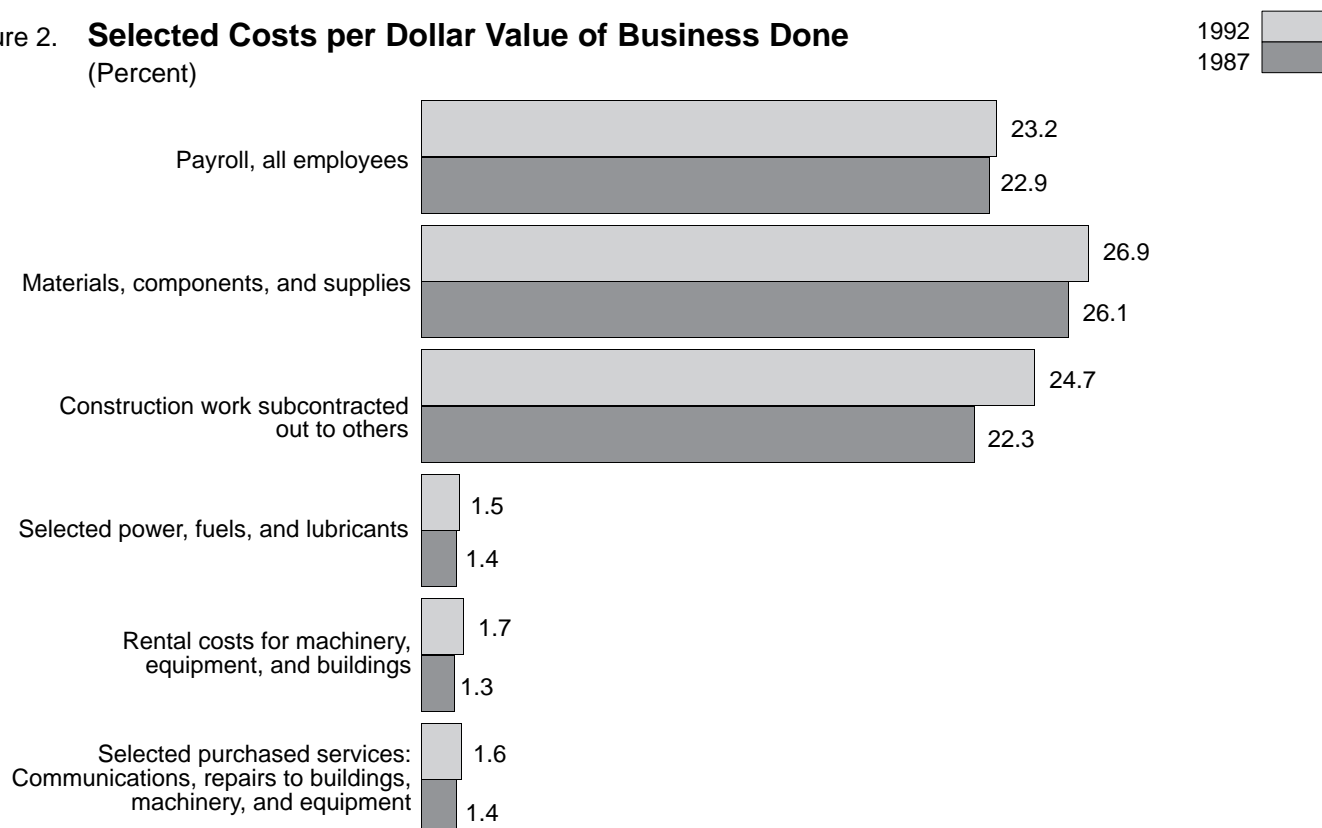


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	29 958	23 376	55 314	8 121 558	21 130	20 638	869 549	8 828	2 738	55 314	7 252 009	1	1
15	Building construction—General contractors and operative builders ----	5 715	3 469	11 560	2 884 643	3 283	2 839	330 626	2 432	630	11 560	2 554 017	2	2
16	Heavy construction other than building construction—contractors -----	644	245	9 982	1 588 452	186	166	8 461	458	79	9 982	1 579 991	1	1
17	Special trade contractors -----	23 599	19 662	33 772	3 648 463	17 661	17 633	530 462	5 938	2 029	33 772	3 118 001	1	1
1711	Plumbing, heating, and air-conditioning --	2 608	1 631	7 665	861 643	1 372	1 363	54 952	1 236	268	7 665	806 691	3	2
1731	Electrical work-----	2 416	1 606	6 009	611 739	1 412	1 350	36 950	1 004	(S)	6 009	574 789	2	2
	1987													
15, 16, 17	Construction industries² -----	34 081	25 401	89 494	12 021 367	23 326	23 014	2 111 457	10 755	2 387	89 494	9 909 910	1	1
15	Building construction—General contractors and operative builders ----	7 492	4 386	25 587	5 237 886	4 297	3 765	706 501	3 195	621	25 587	4 531 385	2	2
16	Heavy construction other than building construction—contractors -----	731	240	12 698	1 367 265	152	144	21 398	579	96	12 698	1 345 867	2	1
17	Special trade contractors -----	24 796	19 802	50 352	4 710 338	18 005	18 179	790 069	6 791	1 623	50 352	3 920 269	1	1
1711	Plumbing, heating, and air-conditioning --	2 536	1 487	11 107	1 030 821	1 251	1 242	73 137	1 285	245	11 107	957 684	2	2
1731	Electrical work-----	2 085	1 243	8 534	692 060	1 068	1 067	45 609	1 017	176	8 534	646 451	2	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	8 828	55 314	41 211	1 679 071	1 139 678	7 142 704	5 351 737	3 399 181
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	1 646	5 149	3 717	112 452	74 816	628 974	449 255	237 053
1522	Other residential buildings -----	69	276	216	6 373	3 840	49 096	27 541	14 235
1531	Operative builders -----	230	997	519	28 882	12 392	285 748	196 161	131 226
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	73	721	504	22 798	12 903	237 991	100 524	74 116
1542	Nonresidential buildings, n.e.c. -----	414	4 419	2 844	160 790	91 627	1 314 341	469 475	246 816
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	163	2 985	2 375	103 029	75 596	470 350	380 721	185 168
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	26	1 167	921	43 395	29 437	182 422	142 931	92 845
1623	Water, sewer, and utility lines -----	105	1 437	1 063	56 183	37 437	180 139	122 811	86 127
1629	Heavy construction, n.e.c. -----	164	4 392	3 132	188 644	120 887	723 205	663 463	551 718
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	1 236	7 665	5 448	238 989	163 517	795 322	694 815	413 725
1721	Painting and paper hanging -----	542	1 948	1 629	42 674	33 390	113 843	108 973	84 908
1731	Electrical work -----	1 004	6 009	4 576	191 330	135 729	570 551	551 858	326 834
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	369	1 879	1 607	48 780	38 564	140 726	131 984	89 230
1742	Plastering, drywall, and insulation work -----	215	1 966	1 568	57 828	41 741	166 660	153 035	99 535
1743	Terrazzo, tile, marble, and mosaic work -----	72	208	169	5 602	4 219	20 071	19 786	11 816
175	Carpentry and floor work:								
1751	Carpentry -----	683	2 098	1 710	41 496	32 010	158 303	139 826	87 156
1752	Floor laying and other floor work -----	141	745	544	19 507	11 740	80 887	70 031	45 258
1761	Roofing, siding, and sheet metal work -----	353	2 406	1 872	68 830	46 739	234 288	210 817	126 458
1771	Concrete work -----	356	1 512	1 246	34 411	25 933	106 711	99 597	66 308
1781	Water well drilling -----	41	200	150	5 749	4 531	19 184	18 636	10 028
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	53	549	408	17 171	11 642	61 061	51 962	(D)
1793	Glass and glazing work -----	75	371	221	9 451	5 288	34 965	31 848	18 432
1794	Excavation work -----	303	1 898	1 511	56 141	43 112	206 001	185 247	132 751
1795	Wrecking and demolition work -----	14	119	89	2 688	1 741	10 321	9 977	(D)
1796	Installing building equipment, n.e.c. -----	48	1 020	790	26 813	19 769	73 544	71 372	58 541
1799	Special trade contractors, n.e.c. -----	433	3 179	2 381	89 065	61 077	278 001	249 091	177 606

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
2 061 862	1 790 966	1 776 097	120 358	83 466	1 109 947	89 494	9 549 266	4 793 254	1	1	5	15, 16, 17
												15
220 767	179 719	32 516	7 182	7 161	71 452	9 836	997 480	428 651	4	5	15	152
13 642	21 555	1 862	467	136	*5 619	1 540	304 677	103 462	21	19	23	1521
73 842	89 587	1 181	1 245	1 807	20 495	4 165	897 440	273 286	8	11	33	1531
26 952	137 466	3 646	2 357	(S)	8 121	1 356	193 194	82 871	9	8	(S)	154
242 174	844 867	48 982	10 062	5 247	92 555	8 690	1 894 541	694 447	3	3	10	1542
												16
200 633	89 629	81 453	19 514	18 211	181 806	4 047	528 259	285 564	3	2	8	1611
52 105	39 491	16 616	9 223	1 452	41 119	1 068	150 625	90 928	2	2	(Z)	162
38 948	57 327	19 874	3 679	2 944	96 365	2 303	214 898	139 151	5	4	10	1622
126 257	59 741	82 385	12 153	3 269	85 611	5 280	437 511	343 760	2	1	10	1623
												17
292 459	100 507	362 466	10 801	8 460	96 698	11 107	949 573	501 254	3	2	18	1711
24 174	4 870	44 964	1 518	1 813	13 783	3 457	178 456	125 084	4	5	31	1721
229 261	18 694	272 126	6 624	4 321	52 640	8 534	641 327	414 076	2	2	10	1731
(D)	8 742	90 651	2 339	(D)	15 024	2 708	163 769	106 084	8	6	(D)	174
55 917	13 625	132 493	2 505	1 188	12 211	3 663	331 590	187 487	6	4	9	1742
7 997	285	18 238	270	(S)	1 744	301	24 668	14 824	15	20	(S)	1743
53 808	18 477	56 763	1 382	1 454	16 040	4 923	291 112	160 913	8	7	33	175
30 614	10 855	41 370	922	(S)	10 152	1 125	84 472	48 668	13	12	(S)	1751
84 399	23 471	105 131	3 757	3 236	35 108	3 520	276 709	160 446	3	2	6	1761
34 187	7 115	53 691	2 425	2 582	35 576	2 970	234 193	148 811	8	7	39	1771
8 608	548	5 046	421	587	11 974	315	30 642	19 203	8	5	2	1781
28 686	9 099	30 072	3 081	*650	8 658	1 062	89 965	50 868	12	6	45	179
14 648	3 117	23 924	579	575	4 838	620	56 707	30 506	7	7	4	1791
59 685	20 754	123 800	9 494	11 813	120 972	2 570	243 550	170 988	6	6	25	1793
(D)	344	4 772	101	(D)	1 223	270	22 012	18 443	(Z)	(Z)	(D)	1794
12 837	2 172	26 190	1 302	389	8 782	823	80 494	56 926	3	3	(Z)	1795
82 329	28 909	95 885	6 955	4 203	61 381	2 384	162 704	103 898	5	4	22	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	8 828	10 755	7 202	7 473	1	1	2	3
Proprietors and working partners.....	2 738	2 387	2 257	3 549	3	5	4	5
All employees**	55 314	89 494	61 233	50 517	1	1	1	1
Construction workers:								
March.....	34 657	62 409	44 996	32 607	1	1	1	1
May	41 967	72 190	52 721	43 386	1	1	1	1
August	45 533	74 988	53 022	46 053	1	1	1	1
November	42 688	71 498	49 970	44 908	1	1	1	1
Average	41 211	70 271	50 924	41 805	1	1	1	1
Other employees:								
March.....	13 974	18 825	10 273	8 287	1	1	2	2
May	14 046	19 047	(NA)	(NA)	1	1	(NA)	(NA)
August	14 143	19 575	(NA)	(NA)	1	1	(NA)	(NA)
November	14 247	19 446	(NA)	(NA)	1	1	(NA)	(NA)
Average	14 103	19 223	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	1 679 071	2 267 162	1 166 941	678 317	1	1	1	1
Payroll, construction workers	1 139 678	1 587 610	936 845	537 336	1	1	1	1
Payroll, other employees	539 393	679 551	230 095	140 981	1	1	1	1
First-quarter payroll, all employees	347 737	476 999	251 917	131 837	1	1	1	1
Fringe benefits, all employees	435 214	530 992	221 813	130 036	1	1	1	1
Legally required expenditures	266 149	353 932	169 002	78 092	1	1	1	1
Voluntary expenditures	169 065	177 059	52 810	51 945	1	1	1	1
Dollar value of business done	7 252 009	9 909 910	4 193 644	2 623 870	1	1	1	1
Value of construction work	7 142 704	9 549 266	4 052 488	2 533 900	1	1	1	1
Value of construction work subcontracted in from others	1 776 097	2 268 914	985 636	527 921	2	2	(Z)	(Z)
Other business receipts	109 306	179 984	117 125	89 970	4	3	1	4
Net value of construction†	5 351 737	7 335 639	3 107 009	1 979 826	1	1	1	1
Value added††	3 399 181	4 793 254	2 027 595	1 194 620	1	1	1	1
Selected costs	3 852 829	4 935 996	2 142 018	1 392 047	1	1	1	1
Materials, components, and supplies	1 951 235	2 582 005	1 114 575	793 382	1	1	1	1
Construction work subcontracted out to others	1 790 966	2 213 627	945 478	554 074	1	2	1	2
Selected power, fuels, and lubricants	110 628	140 363	81 964	44 591	2	1	2	2
Electricity.....	18 798	21 446	12 311	5 630	3	2	2	3
Natural gas	5 067	4 501	2 518	1 664	4	2	4	7
Gasoline and diesel fuel	79 416	105 365	61 417	31 211	2	2	2	2
On highway use	60 204	77 380	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use	19 212	27 985	(NA)	(NA)	3	3	(NA)	(NA)
Other, including lubricating oils and greases.....	7 347	9 051	5 717	6 087	4	3	4	5
Rental cost for machinery, equipment, and buildings	120 358	132 181	55 718	33 890	2	3	2	1
For machinery and equipment	75 663	88 726	42 891	27 169	3	4	2	1
For buildings.....	44 696	43 455	12 827	6 721	3	3	3	3
Selected purchased services	113 816	140 936	61 807	44 625	2	2	2	2
Communication services	40 652	43 799	18 525	13 142	3	2	2	2
Repairs to buildings and other structures	6 599	8 779	3 356	2 101	4	6	4	6
Repairs to machinery and equipment	66 565	88 357	39 925	29 382	2	2	2	2
Ownership of construction projects:								
Value of construction work	7 142 704	9 549 266	4 052 488	2 533 900	1	1	1	1
Government owned	1 887 058	1 389 174	846 191	509 312	2	2	3	1
Federal	206 571	304 024	(NA)	(NA)	5	3	(NA)	(NA)
State and local	1 680 486	1 085 150	(NA)	(NA)	2	2	(NA)	(NA)
Privately owned	5 255 646	8 160 091	3 206 297	2 024 588	1	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 078 045	1 011 726	2	2
Capital expenditures, other than land -----	83 466	192 996	5	3
New -----	66 805	162 477	5	3
Used -----	16 661	30 519	8	6
Retirements and disposition of depreciable assets -----	51 564	43 781	6	8
End-of-year gross book value of depreciable assets -----	1 109 947	1 160 941	2	2
Depreciation charges during year -----	107 453	153 151	3	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	145 801	226 954	6	6
Capital expenditures, other than land -----	8 695	31 238	8	10
New buildings and other structures -----	6 916	25 682	6	12
Used buildings and other structures -----	1 779	5 555	19	9
Retirements and disposition of depreciable assets -----	(S)	10 927	(S)	28
End-of-year gross book value of depreciable assets -----	152 284	247 265	6	6
Depreciation charges during year -----	8 843	24 534	6	11
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	932 243	784 771	2	2
Capital expenditures, other than land -----	74 771	161 758	5	3
New machinery and equipment, including automobiles and trucks -----	59 889	136 794	6	3
New automobiles and trucks, intended primarily for highway use -----	25 737	69 324	8	4
Used machinery and equipment, including automobiles and trucks -----	14 882	24 964	8	6
Retirements and disposition of depreciable assets -----	49 352	32 853	6	5
End-of-year gross book value of depreciable assets -----	957 663	913 676	2	2
Depreciation charges during year -----	98 610	128 616	3	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	8 828	1
Value of construction work	7 142 704	1
Establishments with inventories:		
Number	2 744	3
Value of construction work	3 176 789	1
Inventories ¹ :		
End of 1992, materials and supplies	94 717	7
End of 1991, materials and supplies	95 135	6
Establishments with no inventories:		
Number	2 966	3
Value of construction work	2 479 390	1
Establishments not reporting:		
Number	3 119	2
Value of construction work	1 486 525	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	8 828	6 052	1 554	742	364	82	28	6	—	1	
All employees** -----	55 314	11 010	9 700	9 825	10 593	5 603	4 233	4 352	—	(D)	
Payroll, all employees -----	1 679 071	225 316	254 934	291 635	348 504	205 241	155 504	197 936	—	(D)	
Dollar value of business done -----	7 252 009	1 152 062	1 011 759	1 067 877	1 379 204	1 039 430	838 158	763 520	—	(D)	
Value of construction work -----	7 142 704	1 137 748	994 570	1 053 415	1 364 163	1 011 751	833 526	747 531	—	(D)	
Net value of construction work† -----	5 351 737	944 795	800 318	859 470	997 406	604 541	461 616	683 591	—	(D)	
Value added†† -----	3 399 181	562 904	483 356	535 783	640 602	366 696	231 530	578 310	—	(D)	
Cost of materials, components, supplies, and fuels -----	2 061 862	396 206	334 151	338 148	371 845	265 524	234 718	121 270	—	(D)	
Cost of construction work subcontracted out to others -----	1 790 966	192 952	194 252	193 945	366 757	407 210	371 910	63 940	—	(D)	
Rental cost for machinery, equipment, and buildings -----	120 358	16 709	12 980	17 482	19 406	16 389	19 691	17 701	—	(D)	
Capital expenditures, other than land -----	83 466	16 701	11 640	20 511	12 345	10 138	8 208	3 923	—	(D)	
End-of-year gross book value of depreciable assets -----	1 109 947	188 063	195 665	216 529	206 143	150 286	112 727	40 534	—	(D)	
1987											
All employees** -----	89 494	12 528	15 490	17 726	18 713	8 979	7 462	8 593	(D)	(D)	
Value of construction work -----	9 549 266	1 297 640	1 313 705	1 824 121	2 118 358	1 180 284	1 815 155	(D)	(D)	(D)	
Value added†† -----	4 793 254	610 829	630 043	962 366	1 045 541	558 948	389 652	595 874	(D)	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	3	4	4	2	(Z)	(Z)	(Z)	—	(D)	
Net value of construction work† -----	1	4	5	3	1	(Z)	(Z)	(Z)	—	(D)	
Capital expenditures, other than land -----	5	12	14	15	3	(Z)	(Z)	(Z)	—	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	8 828	(S)	(S)	1 324	2 565	1 533	1 122	744	244	109	84
All employees** -----	55 314	(S)	(S)	2 001	5 937	6 655	7 937	10 255	6 036	4 728	10 822
Payroll, all employees -----	1 679 071	(S)	(S)	27 572	111 723	152 108	214 104	300 644	206 439	179 589	478 178
Dollar value of business done -----	7 252 009	(S)	(S)	97 437	414 862	541 521	789 868	1 126 120	841 819	763 031	2 648 245
Value of construction work -----	7 142 704	(S)	(S)	96 865	410 632	536 348	776 379	1 106 201	827 635	756 062	2 603 846
Net value of construction work† -----	5 351 737	(S)	(S)	90 587	374 775	471 913	655 856	913 672	651 451	560 296	1 605 965
Value added†† -----	3 399 181	(S)	(S)	57 769	229 890	285 244	398 455	568 372	423 654	350 611	1 068 796
Cost of materials, components, supplies, and fuels -----	2 061 862	(S)	(S)	33 390	149 114	191 842	270 890	365 218	241 981	216 653	581 568
Cost of construction work subcontracted out to others -----	1 790 966	(S)	(S)	6 279	35 857	64 436	120 523	192 530	176 184	195 766	997 881
Rental cost for machinery, equipment, and buildings -----	120 358	(S)	(S)	1 386	8 580	7 704	13 012	17 198	11 053	11 783	49 302
Capital expenditures, other than land -----	83 466	(S)	(S)	1 196	8 014	6 760	(S)	17 053	9 204	8 343	18 558
End-of-year gross book value of depreciable assets -----	1 109 947	(S)	(S)	14 973	93 482	92 405	191 927	220 271	122 254	122 970	247 204
1987											
All employees** -----	89 494	(S)	(S)	(S)	(S)	10 278	12 571	16 009	11 966	8 040	17 903
Value of construction work -----	9 549 266	(S)	(S)	(S)	(S)	683 254	984 282	1 743 311	1 498 531	1 103 711	2 929 489
Value added†† -----	4 793 254	(S)	(S)	(S)	(S)	380 886	537 394	882 241	746 965	504 412	1 385 329
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	7	5	5	5	3	2	(Z)	(Z)
Net value of construction work† -----	1	(S)	(S)	6	4	5	5	3	4	2	(Z)
Capital expenditures, other than land -----	5	(S)	(S)	26	21	17	(S)	13	16	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	7 142 704	3 520 062	2 071 296	1 295 756	1	1	1	1
Building construction	5 037 356	2 665 347	1 688 720	683 290	1	2	2	2
Single-family houses	1 544 496	913 837	426 899	203 761	3	4	4	5
Single-family houses, detached	1 415 415	831 582	404 633	179 199	3	5	4	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	129 082	82 254	22 266	24 561	7	9	12	9
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	141 397	62 111	40 989	38 297	5	5	12	7
Other residential buildings, including hotels, motels, and tourist cabins	84 922	60 152	17 129	7 641	7	8	11	18
Hotels, motels, and tourist cabins	38 355	28 432	(S)	(S)	3	3	(S)	(S)
Other residential buildings	46 567	31 720	12 171	*2 676	12	16	15	51
Office buildings	697 213	301 352	291 124	104 737	2	2	2	5
Other commercial buildings such as stores, restaurants, and automobile service stations	576 175	289 982	188 098	98 094	3	3	6	7
Industrial buildings and warehouses	755 886	368 108	278 488	109 291	2	3	4	4
Industrial buildings	660 670	318 416	243 130	99 124	2	3	3	4
Warehouses	95 216	49 692	35 358	10 167	9	5	22	18
Religious buildings	56 760	19 325	19 298	18 137	3	7	6	4
Educational buildings	560 380	299 152	225 051	36 177	2	3	3	3
Hospitals and institutional buildings	413 646	208 255	156 631	48 760	3	5	3	5
Amusement, social, and recreational buildings, indoors	60 118	46 550	10 598	2 970	1	1	6	3
Other nonresidential buildings	146 362	96 523	34 414	15 425	3	2	5	17
Nonbuilding construction	1 849 757	854 715	382 576	612 466	1	1	2	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	457 537	245 567	116 668	95 303	2	2	4	5
Airport runways and related work	20 299	(D)	(D)	(D)	(Z)	(D)	(D)	(D)
Private driveways and parking areas	39 613	21 141	5 917	12 554	12	17	15	26
Fencing	32 021	15 245	12 478	4 298	13	20	8	23
Recreational facilities	15 332	(D)	1 496	(D)	9	(D)	15	(D)
Bridges, tunnels, and elevated highways	217 073	100 529	103 155	13 389	2	1	2	29
Power and communication transmission lines, towers, and related facilities	127 130	51 943	12 175	8 012	5	5	3	10
Sewers, water mains, and related facilities	132 716	80 589	30 320	21 806	6	8	9	11
Sewers, sewer lines, septic systems, and related facilities	94 445	60 596	23 998	9 851	7	7	10	21
Water mains and related facilities	38 271	19 994	6 322	11 955	9	15	5	6
Sewage treatment and water treatment plants	103 433	59 945	37 775	5 712	5	4	8	8
Sewage treatment plants	60 636	31 994	(D)	(D)	9	8	(D)	(D)
Water treatment plants	42 797	27 952	(D)	(D)	2	2	(D)	(D)
Other nonbuilding construction	759 601	266 251	50 219	443 131	1	1	4	1
Construction work, n.s.k.	255 590	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)
1987								
Value of construction work	9 549 266	5 822 082	2 145 684	1 046 318	1	1	2	2
Building construction	7 285 244	4 861 658	1 765 518	612 300	1	1	2	2
Single-family houses	2 593 249	1 863 705	543 552	185 991	2	3	4	5
Single-family houses, detached	1 981 997	1 342 060	478 052	161 884	3	3	5	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	611 252	521 644	65 499	24 107	5	6	10	6
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	467 155	301 746	121 893	43 515	5	7	8	7
Other residential buildings, including hotels, motels, and tourist cabins	326 288	229 374	73 101	23 812	6	5	19	6
Hotels, motels, and tourist cabins	98 512	68 668	21 157	8 686	8	11	10	11
Other residential buildings	227 775	160 705	51 944	15 126	7	6	27	8
Office buildings	1 416 266	1 021 155	299 873	95 237	1	1	3	3
Other commercial buildings such as stores, restaurants, and automobile service stations	905 688	544 458	258 205	103 024	2	2	3	4
Industrial buildings and warehouses	763 155	462 279	200 791	100 084	3	4	2	4
Industrial buildings	635 750	367 258	180 640	87 851	3	4	2	4
Warehouses	127 405	95 020	20 150	12 233	5	6	8	7
Religious buildings	64 358	26 156	26 450	11 751	3	3	4	7
Educational buildings	282 873	141 901	111 842	29 130	3	4	3	10
Hospitals and institutional buildings	339 195	222 826	92 168	24 200	2	1	8	5
Other nonresidential buildings	127 017	74 459	39 686	12 877	4	4	3	24
Nonbuilding construction	1 728 839	934 022	378 119	416 697	1	2	3	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	500 133	205 926	192 817	101 389	3	5	4	4
Private driveways and parking areas	72 847	47 697	12 684	12 466	12	14	17	17
Power and communication transmission lines, towers, and related facilities	141 477	74 773	48 856	17 846	2	2	2	12
Sewers, water mains, and related facilities	208 747	145 899	38 044	24 802	4	3	6	13
Sewers, sewer lines, septic systems, and related facilities	124 529	88 837	23 595	12 095	3	3	6	13
Water mains and related facilities	84 218	57 061	14 449	12 707	7	5	13	17
Sewage treatment and water treatment plants	66 783	37 237	27 733	1 812	6	8	10	12
Sewage treatment plants	45 219	17 723	26 312	1 183	8	16	9	9
Water treatment plants	21 564	19 513	*1 420	629	4	2	46	28
Other nonbuilding construction	738 852	422 490	57 985	258 382	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	535 181	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	8 828	41 211	34 657	41 967	45 533	42 688	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	1 646	3 717	3 261	3 883	4 210	3 513	3	4	4	4	4	4
1522	Other residential buildings -----	69	216	227	201	237	200	21	25	27	22	26	25
1531	Operative builders -----	230	519	519	519	519	521	11	10	10	9	9	10
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	73	504	402	496	485	(S)	16	12	10	9	9	(S)
1542	Nonresidential buildings, n.e.c. ---	414	2 844	2 538	2 774	3 191	2 875	8	4	4	5	4	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	163	2 375	1 475	2 771	2 859	2 395	9	3	3	3	3	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	26	921	667	885	1 103	1 028	9	2	2	1	2	2
1623	Water, sewer, and utility lines -----	105	1 063	942	1 118	1 149	1 044	7	5	5	5	5	5
1629	Heavy construction, n.e.c. -----	164	3 132	2 581	3 580	2 531	3 838	13	3	3	3	4	2
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 236	5 448	5 092	5 241	5 758	5 704	2	3	2	3	3	4
1721	Painting and paper hanging -----	542	1 629	1 153	1 642	2 174	1 545	4	4	7	5	4	5
1731	Electrical work -----	1 004	4 576	4 389	4 422	4 846	4 645	2	2	2	2	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	369	1 607	1 160	1 740	1 980	1 549	5	8	7	8	11	7
1742	Plastering, drywall, and insulation work -----	215	1 568	1 447	1 491	1 632	1 704	7	6	7	7	5	5
1743	Terrazzo, tile, marble, and mosaic work -----	72	169	158	172	199	147	17	16	17	16	15	16
175	Carpentry and floor work:												
1751	Carpentry -----	683	1 710	1 447	1 708	2 030	1 652	4	8	8	9	11	7
1752	Floor laying and other floor work --	141	544	527	585	566	499	7	14	14	15	13	12
1761	Roofing, siding, and sheet metal work -----	353	1 872	1 467	1 912	2 219	1 892	6	3	4	3	2	3
1771	Concrete work -----	356	1 246	660	1 246	1 607	1 470	6	7	10	7	8	10
1781	Water well drilling -----	41	150	128	161	163	146	18	11	2	10	10	7
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	53	408	380	386	446	421	16	13	12	12	13	16
1793	Glass and glazing work -----	75	221	212	216	220	235	13	6	6	6	6	7
1794	Excavation work -----	303	1 511	1 162	1 516	1 706	1 659	7	6	7	5	5	6
1795	Wrecking and demolition work -----	14	89	89	80	92	96	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1796	Installing building equipment, n.e.c. -----	48	790	681	707	857	915	4	3	4	3	4	2
1799	Special trade contractors, n.e.c. ---	433	2 381	1 893	2 518	2 752	2 362	8	5	5	5	5	5

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	6.3	30.4	173.3	.235	.289	.251	.249	.017
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.1	21.8	169.2	.179	.351	.286	.052	.011
1522	Other residential buildings -----	4.0	23.1	227.3	.130	.278	.439	.038	.010
1531	Operative builders -----	4.3	29.0	550.6	.101	.258	.314	.004	.004
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	9.8	31.6	472.2	.096	.113	.578	.015	.010
1542	Nonresidential buildings, n.e.c. -----	10.7	36.4	462.1	.122	.184	.643	.037	.008
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	18.3	34.5	198.0	.219	.427	.191	.173	.041
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	44.6	37.2	198.1	.238	.286	.216	.091	.051
1623	Water, sewer, and utility lines -----	13.7	39.1	169.5	.312	.216	.318	.110	.020
1629	Heavy construction, n.e.c. -----	26.8	43.0	230.9	.261	.175	.083	.114	.017
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	6.2	31.2	146.0	.300	.368	.126	.456	.014
1721	Painting and paper hanging -----	3.6	21.9	69.9	.375	.212	.043	.395	.013
1731	Electrical work -----	6.0	31.8	124.7	.335	.402	.033	.477	.012
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.1	26.0	87.6	.347	(D)	.062	.644	.017
1742	Plastering, drywall, and insulation work -----	9.1	29.4	106.3	.347	.336	.082	.795	.015
1743	Terrazzo, tile, marble, and mosaic work -----	2.9	26.9	118.8	.279	.398	.014	.909	.013
175	Carpentry and floor work:								
1751	Carpentry -----	3.1	19.8	92.6	.262	.340	.117	.359	.009
1752	Floor laying and other floor work -----	5.3	26.2	148.7	.241	.378	.134	.511	.011
1761	Roofing, siding, and sheet metal work -----	6.8	28.6	125.2	.294	.360	.100	.449	.016
1771	Concrete work -----	4.2	22.8	85.6	.322	.320	.067	.503	.023
1781	Water well drilling -----	4.9	28.7	127.9	.300	.449	.029	.263	.022
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	10.3	31.3	149.7	.281	.470	.149	.492	.050
1793	Glass and glazing work -----	5.0	25.5	158.2	.270	.419	.089	.684	.017
1794	Excavation work -----	6.3	29.6	136.3	.273	.290	.101	.601	.046
1795	Wrecking and demolition work -----	8.5	22.6	116.0	.260	(D)	.033	.462	.010
1796	Installing building equipment, n.e.c. -----	21.2	26.3	93.1	.365	.175	.030	.356	.018
1799	Special trade contractors, n.e.c. -----	7.3	28.0	116.8	.320	.296	.104	.345	.025

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA											
15,16,17	Construction industries	12 243	81 838	2 373 923	10 850 651	7 795 632	4 779 944	3 171 595	3 055 019	114 237	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	5 708	110 750	706 759	493 053	242 509	263 814	213 705	6 606	5	5
1522	Other residential buildings	175	813	22 429	112 671	72 527	46 531	29 106	40 144	807	13	12
1531	Operative builders	385	1 578	44 821	682 250	442 959	218 538	236 385	239 291	2 619	7	14
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	156	1 029	32 600	206 537	101 940	73 206	30 157	104 597	(S)	10	6
1542	Nonresidential buildings, n.e.c.	661	7 636	251 621	2 297 588	792 724	406 931	422 836	1 504 864	8 797	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	186	2 376	76 098	351 410	283 480	167 496	119 003	67 930	9 828	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	29	1 356	61 789	459 022	308 945	202 177	108 555	150 077	6 415	3	1
1623	Water, sewer, and utility lines	240	2 825	88 879	361 351	287 073	179 918	113 000	74 277	13 030	5	4
1629	Heavy construction, n.e.c.	265	5 716	231 386	916 111	708 579	507 539	208 904	207 533	11 223	1	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 823	11 509	353 357	1 207 486	1 033 712	613 810	435 086	173 774	10 922	2	2
1721	Painting and paper hanging	614	2 761	55 356	148 651	138 536	104 643	34 419	10 115	2 239	5	6
1731	Electrical work	1 468	10 685	339 496	1 016 518	969 186	600 178	382 086	47 332	8 411	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	2 317	51 729	165 144	154 433	107 492	47 573	10 711	1 838	10	5
1742	Plastering, drywall, and insulation work	429	3 271	89 477	287 958	256 401	164 927	94 202	31 557	2 020	9	9
1743	Terrazzo, tile, marble, and mosaic work	74	282	(S)	20 828	20 031	(S)	8 978	*797	(S)	17	12
175	Carpentry and floor work:											
1751	Carpentry	924	3 085	67 890	287 397	237 944	132 041	108 826	49 453	(S)	6	6
1752	Floor laying and other floor work	244	969	21 663	122 958	(D)	51 223	58 862	(D)	829	8	(D)
1761	Roofing, siding, and sheet metal work	431	2 833	71 126	252 638	232 396	138 680	96 777	20 242	(S)	5	5
1771	Concrete work	506	2 796	63 312	229 191	212 292	132 871	80 223	16 899	4 478	6	5
1781	Water well drilling	59	344	10 038	32 704	32 475	20 418	12 117	228	671	13	12
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	97	1 818	58 940	150 435	(D)	103 748	34 133	(D)	2 110	7	(D)
1793	Glass and glazing work	98	527	12 828	41 966	41 197	26 199	18 892	(S)	*174	10	12
1794	Excavation work	417	2 138	55 937	206 929	181 644	135 178	55 880	25 285	5 767	9	8
1795	Wrecking and demolition work	(S)	342	8 672	33 380	29 628	25 313	4 978	3 752	537	2	2
1796	Installing building equipment, n.e.c.	104	2 698	74 030	219 189	212 956	159 611	54 929	6 233	1 411	1	1
1799	Special trade contractors, n.e.c.	502	4 428	111 827	333 580	308 834	206 493	111 877	24 745	8 170	5	5
	Boston, MA-NH PMSA											
15,16,17	Construction industries	6 890	49 004	1 486 300	7 345 622	5 037 835	3 091 565	2 036 809	2 307 788	63 841	1	1
	(See appropriate State for SIC detail.)											
	Brockton, MA PMSA											
15,16,17	Construction industries	545	3 110	82 089	306 915	253 477	165 924	94 379	53 437	3 003	4	3
	(See appropriate State for SIC detail.)											
	Fitchburg-Leominster, MA PMSA											
15,16,17	Construction industries	269	1 302	32 635	128 736	104 319	61 979	46 007	24 417	1 269	10	9
	(See appropriate State for SIC detail.)											
	Lawrence, MA-NH PMSA											
15,16,17	Construction industries	817	5 082	124 320	496 532	402 893	259 128	152 254	93 639	14 205	2	2
	(See appropriate State for SIC detail.)											

CT-14 CONNECTICUT

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON–WORCESTER–LAWRENCE, MA–NH–ME–CT CMSA—Con.											
	Lowell, MA–NH PMSA											
15,16,17	Construction industries	711	4 158	107 067	528 670	419 261	238 826	188 724	109 408	9 495	3	4
	(See appropriate State for SIC detail.)											
	Manchester, NH PMSA											
15,16,17	Construction industries	504	3 407	87 906	396 764	286 943	157 297	137 693	109 821	4 018	5	5
	(See appropriate State for SIC detail.)											
	Nashua, NH PMSA											
15,16,17	Construction industries	359	2 564	69 678	304 805	209 941	135 141	90 245	94 864	2 972	3	3
	(See appropriate State for SIC detail.)											
	New Bedford, MA PMSA											
15,16,17	Construction industries	322	1 346	29 494	120 156	103 574	65 071	39 438	16 582	2 690	9	7
	(See appropriate State for SIC detail.)											
	Portsmouth–Rochester, NH–ME PMSA											
15,16,17	Construction industries	714	2 907	64 307	262 556	224 525	132 790	96 814	38 030	4 418	7	7
	(See appropriate State for SIC detail.)											
	Worcester, MA–CT PMSA											
15,16,17	Construction industries	1 112	8 958	290 127	959 896	752 864	472 223	289 233	207 032	8 326	3	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	(S)	(S)	(S)	(S)	(S)	18 336	(S)	422	(S)	(S)
1522	Other residential buildings	(S)	(D)	(D)	(S)	(S)	(S)	(D)	(S)	—	(D)	(S)
1531	Operative builders	(S)	101	(S)	(S)	(S)	(D)	(S)	(S)	—	32	(S)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	*24	146	(D)	10 840	7 356	4 252	3 144	3 484	—	39	32
1542	Nonresidential buildings, n.e.c.	54	432	13 752	150 316	48 175	24 827	24 617	102 142	848	14	10
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	25	169	(D)	20 032	(D)	11 732	5 348	(D)	(S)	13	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	*3	*30	*1 194	*5 276	(S)	*3 196	*1 294	(S)	(D)	62	(S)
1623	Water, sewer, and utility lines	32	300	8 477	25 440	23 257	16 360	6 914	2 183	247	28	18
1629	Heavy construction, n.e.c.	(S)	2 308	(D)	227 828	200 323	(D)	73 682	27 505	(D)	1	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	152	887	22 828	77 802	66 953	39 451	28 298	10 848	(S)	15	14
1721	Painting and paper hanging	55	192	3 487	8 869	8 561	(D)	3 016	*307	(D)	32	30
1731	Electrical work	155	1 133	34 670	98 565	91 669	55 659	36 311	6 896	402	9	7
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	*20	97	2 898	8 610	8 273	5 751	2 524	*337	304	23	16
1742	Plastering, drywall, and insulation work	58	200	4 105	19 148	14 382	9 600	4 783	4 766	43	26	24
1743	Terrazzo, tile, marble, and mosaic work	*3	(S)	*399	*1 632	*1 632	*472	*1 161	—	—	(S)	71
175	Carpentry and floor work:											
1751	Carpentry	94	331	8 640	40 102	31 241	20 108	11 744	*8 861	*30	19	22
1752	Floor laying and other floor work	34	*110	*2 233	11 106	*10 151	*5 631	*4 520	*955	*186	42	40
1761	Roofing, siding, and sheet metal work	(S)	(S)	5 001	(S)	(S)	(S)	(S)	*763	(S)	(S)	(S)
1771	Concrete work	38	(D)	2 235	(D)	(D)	4 774	3 390	(S)	(D)	(D)	(D)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

CONNECTICUT CT—15

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16,17	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.											
	Worcester, MA—CT PMSA—Con.											
	Construction industries—Con.											
	Special trade contractors—Con.											
	1781 Water well drilling	11	123	4 207	(D)	(D)	(D)	4 455	*81	(D)	23	(D)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection	*13	(D)	(D)	(D)	(D)	(D)	4 041	(D)	(S)	(D)	(D)
	1793 Glass and glazing work	*15	*71	1 959	4 956	(D)	*3 257	*2 966	(D)	(S)	44	(D)
	1794 Excavation work	44	244	6 544	23 101	20 070	(D)	4 098	3 031	1 030	25	21
	1795 Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
	1796 Installing building equipment, n.e.c. .	7	171	1 665	(D)	(D)	2 978	679	(D)	—	(Z)	(D)
	1799 Special trade contractors, n.e.c.	(S)	292	7 098	27 911	(D)	(D)	13 492	(D)	211	23	(D)
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA											
	Construction industries	42 350	293 351	9 218 472	37 414 756	28 282 143	18 392 725	10 662 353	9 132 613	369 395	(Z)	(Z)
	15 Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses	7 113	21 794	432 130	2 472 841	1 798 370	985 496	848 216	674 471	20 780	2	3
	1522 Other residential buildings	835	5 490	153 426	927 370	551 355	337 646	224 493	376 015	4 926	5	6
	1531 Operative builders	1 018	6 282	181 447	2 108 389	1 398 163	896 224	583 977	710 226	10 621	4	5
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses	473	6 777	228 107	1 478 248	721 385	485 489	256 717	756 863	6 091	3	3
	1542 Nonresidential buildings, n.e.c.	2 184	25 875	942 296	6 760 487	2 879 876	1 837 012	1 345 434	3 880 610	31 176	2	1
	16 Heavy construction other than building construction—contractors:											
	1611 Highway and street construction	648	11 541	420 833	1 779 832	1 448 854	921 211	565 867	330 978	42 479	2	2
	162 Heavy construction, except highway:											
	1622 Bridge, tunnel, and elevated highway construction	78	4 397	198 889	823 663	632 063	445 470	199 490	191 600	10 308	1	1
	1623 Water, sewer, and utility lines	466	9 358	355 962	1 249 484	1 065 185	789 931	296 065	184 299	27 771	2	2
	1629 Heavy construction, n.e.c.	676	10 703	438 031	1 750 592	1 442 084	1 059 465	466 715	308 508	29 103	2	1
	17 Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning	6 509	42 500	1 392 063	4 696 119	4 054 819	2 482 719	1 610 349	641 300	44 984	1	1
	1721 Painting and paper hanging	2 460	11 826	280 880	750 105	701 211	534 363	171 438	48 895	9 868	3	2
	1731 Electrical work	5 212	42 806	1 529 521	4 135 160	3 952 544	2 587 075	1 383 066	182 616	29 419	1	1
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work	1 740	8 920	215 431	720 061	626 354	420 524	210 129	93 707	6 858	3	3
	1742 Plastering, drywall, and insulation work	959	11 663	399 161	1 061 626	954 210	670 604	289 450	107 416	9 942	3	2
	1743 Terrazzo, tile, marble, and mosaic work	560	2 518	72 380	227 457	212 009	135 777	78 384	15 448	2 410	8	7
	175 Carpentry and floor work:											
	1751 Carpentry	3 414	12 366	283 674	1 082 162	945 907	562 093	401 491	136 255	(S)	3	4
	1752 Floor laying and other floor work	756	3 529	94 519	358 405	320 221	190 894	138 062	38 184	(S)	3	5
	1761 Roofing, siding, and sheet metal work	1 817	10 839	307 237	976 792	882 317	563 423	324 331	94 475	12 679	2	2
	1771 Concrete work	1 218	7 659	190 507	639 068	591 850	359 217	241 033	47 218	9 701	7	4
	1781 Water well drilling	127	694	21 589	78 340	73 778	45 316	28 540	4 562	1 335	7	6
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection	275	3 229	117 785	365 864	324 796	239 101	88 923	41 068	2 428	5	2
	1793 Glass and glazing work	403	2 449	67 938	215 385	204 561	122 457	89 496	10 823	1 744	5	4
	1794 Excavation work	926	4 876	140 467	476 199	427 018	302 804	134 726	49 181	20 201	4	5
	1795 Wrecking and demolition work	90	1 668	38 783	141 649	126 897	106 930	23 890	14 752	1 945	2	3
	1796 Installing building equipment, n.e.c. .	339	7 802	311 525	841 241	792 198	565 583	228 917	49 042	4 371	1	(Z)
	1799 Special trade contractors, n.e.c.	2 056	15 790	403 891	1 298 219	1 154 116	745 902	433 154	144 102	16 943	3	3
15,16,17	Bergen—Passaic, NJ PMSA											
	Construction industries	3 805	27 827	877 468	3 341 538	2 675 177	1 825 453	968 390	666 362	32 405	1	1
	(See appropriate State for SIC detail.)											

CT-16 CONNECTICUT

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	Bridgeport, CT PMSA											
15,16,17	Construction industries	1 032	5 940	178 098	698 909	529 942	347 931	194 890	168 967	8 091	3	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	157	458	10 902	60 267	45 066	23 119	22 668	15 201	493	17	18
1522	Other residential buildings	*17	*50	*1 135	(D)	(D)	*2 049	3 023	(D)	—	44	(D)
1531	Operative builders	29	80	2 357	*18 605	(D)	*8 148	6 032	(D)	*685	23	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(D)	(D)	(S)	(D)	(D)	(S)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c.	55	628	21 218	116 334	61 395	(D)	28 021	54 939	1 370	5	7
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	(S)	(S)	16 531	(D)	(D)	8 067	(D)	(D)	(S)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	(S)	448	23 223	84 261	(D)	24 295	13 330	(D)	1 383	4	(D)
1629	Heavy construction, n.e.c.	(S)	(S)	(S)	(D)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	132	828	26 435	86 822	77 670	49 169	28 729	9 152	226	7	5
1721	Painting and paper hanging	63	281	7 198	16 889	16 488	13 093	3 432	401	*125	12	9
1731	Electrical work	150	791	20 301	61 411	59 650	(D)	25 901	(S)	(D)	9	9
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	2 445	(D)	(S)	(S)
1742	Plastering, drywall, and insulation work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	1 920	(S)	(S)	(S)
1743	Terrazzo, tile, marble, and mosaic work	11	25	607	2 593	2 481	1 395	1 086	112	(D)	(Z)	(Z)
175	Carpentry and floor work:											
1751	Carpentry	101	320	5 696	25 761	23 222	14 602	8 712	2 539	76	25	21
1752	Floor laying and other floor work	14	33	512	(D)	(D)	1 301	1 391	317	(S)	2	(D)
1761	Roofing, siding, and sheet metal work	49	268	6 226	24 825	19 862	12 205	7 657	4 963	(D)	7	7
1771	Concrete work	30	150	3 825	9 874	9 510	5 837	3 673	365	*100	18	15
1781	Water well drilling	2	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	3	57	3 070	(D)	(D)	(D)	3 838	(D)	(D)	(Z)	(D)
1793	Glass and glazing work	(S)	49	1 126	3 042	3 029	1 755	1 280	*13	(D)	12	10
1794	Excavation work	39	115	3 064	15 965	15 417	12 601	3 110	548	*984	27	19
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	(S)	185	(S)	(S)	(D)	(S)	(S)	(D)	147	(Z)	(D)
1799	Special trade contractors, n.e.c.	48	261	5 448	16 428	14 927	11 483	3 464	1 500	(D)	20	17
	Danbury, CT PMSA											
15,16,17	Construction industries	710	3 255	98 901	453 931	324 836	195 875	133 634	129 095	6 059	4	4
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	163	555	12 731	62 366	46 483	25 014	22 137	15 883	343	11	12
1522	Other residential buildings	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1531	Operative builders	19	64	2 637	(D)	(D)	*3 053	(S)	(D)	(D)	23	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	44	(S)	7 336	4 472	2 780	1 692	2 864	(D)	(Z)	(Z)
1542	Nonresidential buildings, n.e.c.	20	251	12 009	118 760	(D)	23 744	12 227	(D)	299	(Z)	(D)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

CONNECTICUT CT—17

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	Danbury, CT PMSA—Con.											
15,16, 17	Construction industries—Con.											
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	(S)	175	5 600	21 077	19 601	11 460	8 142	1 476	(S)	23	8
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines -----	(S)	*30	*1 065	*4 665	*4 260	(D)	*2 209	*405	(D)	46	65
1629	Heavy construction, n.e.c. -----	(S)	(S)	(D)	(D)	(D)	(S)	(D)	(S)	(S)	(S)	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning -----	105	467	14 093	(S)	53 328	(S)	19 895	(S)	(S)	14	17
1721	Painting and paper hanging-----	46	96	1 425	3 734	3 602	2 753	853	132	(S)	25	20
1731	Electrical work -----	94	550	18 969	65 336	61 618	36 523	25 205	3 718	551	6	6
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	25	38	952	3 731	3 413	2 192	(S)	318	(D)	29	19
1742	Plastering, drywall, and insulation work -----	(S)	224	7 907	18 640	(D)	11 431	6 109	(D)	(D)	5	(D)
1743	Terrazzo, tile, marble, and mosaic work -----	5	(D)	(S)	(D)	(D)	(D)	211	(D)	—	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	53	178	3 126	8 461	7 658	5 894	1 896	803	(D)	32	21
1752	Floor laying and other floor work ---	16	59	*1 658	5 946	5 706	*3 274	2 472	240	(D)	37	39
1761	Roofing, siding, and sheet metal work -----	24	85	2 441	13 111	10 813	6 700	4 113	2 298	50	7	4
1771	Concrete work -----	38	147	3 127	8 163	7 791	5 742	2 290	372	44	29	21
1781	Water well drilling -----	4	9	235	956	(D)	581	367	(D)	—	(Z)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1793	Glass and glazing work -----	(S)	26	633	(D)	(D)	1 469	1 102	(D)	(D)	(Z)	(D)
1794	Excavation work -----	20	100	3 876	11 840	11 255	8 264	3 196	585	*1 055	29	34
1795	Wrecking and demolition work -----	(S)	(S)	(S)	(S)	(S)	(S)	—	—	—	(S)	(S)
1796	Installing building equipment, n.e.c. -	1	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1799	Special trade contractors, n.e.c.-----	(S)	(S)	(S)	(S)	(D)	(D)	(D)	(D)	944	(S)	(D)
	Dutchess County, NY PMSA											
15,16, 17	Construction industries -----	742	4 096	114 520	489 015	375 227	231 309	156 061	113 789	6 023	5	6
	(See appropriate State for SIC detail.)											
	Jersey City, NJ PMSA											
15,16, 17	Construction industries -----	776	5 896	188 387	674 560	558 706	369 589	196 350	115 854	5 989	3	4
	(See appropriate State for SIC detail.)											
	Middlesex–Somerset–Hunterdon, NJ PMSA											
15,16, 17	Construction industries -----	2 765	19 015	604 438	2 620 186	2 000 280	1 247 470	789 895	619 906	29 971	1	2
	(See appropriate State for SIC detail.)											
	Monmouth–Ocean, NJ PMSA											
15,16, 17	Construction industries -----	2 725	15 377	418 295	2 128 055	1 594 996	1 004 473	631 216	533 059	25 342	2	3
	(See appropriate State for SIC detail.)											
	Nassau–Suffolk, NY PMSA											
15,16, 17	Construction industries -----	8 068	44 952	1 224 727	4 994 826	3 872 198	2 440 215	1 491 173	1 122 629	54 762	1	1
	(See appropriate State for SIC detail.)											

CT–18 CONNECTICUT

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	New Haven–Meriden, CT PMSA											
15,16,17	Construction industries	1 351	9 080	282 141	1 101 261	864 400	532 933	350 990	236 861	(S)	3	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	231	717	14 227	83 331	57 050	31 234	27 465	26 282	649	12	17
1522	Other residential buildings	(S)	(D)	(D)	(D)	(D)	(S)	(D)	(D)	(D)	(D)	(D)
1531	Operative builders	47	253	5 824	60 571	46 360	35 385	11 203	14 210	149	11	14
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	20	106	3 114	15 796	9 535	5 768	(S)	(S)	(D)	21	17
1542	Nonresidential buildings, n.e.c.	(S)	(S)	18 656	126 821	42 189	(D)	18 532	84 632	(S)	(S)	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	30	266	10 888	47 488	43 143	26 460	(S)	(S)	(S)	17	7
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	11	77	3 540	(D)	(D)	6 760	(D)	(D)	(D)	16	(D)
1629	Heavy construction, n.e.c.	18	825	40 237	150 666	(D)	(D)	(D)	(D)	142	8	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	196	1 401	46 116	157 240	130 498	76 607	56 157	26 742	(S)	10	6
1721	Painting and paper hanging	96	381	7 273	19 643	18 712	14 087	4 625	931	102	13	6
1731	Electrical work	169	1 110	40 842	108 428	104 632	65 311	40 262	(S)	(S)	7	5
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	158	3 202	8 046	7 620	5 194	2 426	427	235	8	9
1742	Plastering, drywall, and insulation work	40	(S)	10 046	39 700	34 386	20 059	14 857	(S)	(S)	(S)	14
1743	Terrazzo, tile, marble, and mosaic work	*18	60	(D)	5 630	5 586	*3 664	1 923	44	31	32	38
175	Carpentry and floor work:											
1751	Carpentry	(S)	303	5 246	17 959	15 982	10 498	5 705	1 977	(S)	32	19
1752	Floor laying and other floor work	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(S)	(S)	(D)
1761	Roofing, siding, and sheet metal work	47	428	13 810	46 127	41 587	25 828	15 759	4 540	(D)	7	3
1771	Concrete work	57	300	7 084	(S)	(S)	(S)	(S)	(S)	(S)	16	(S)
1781	Water well drilling	*15	(D)	(D)	5 959	5 709	3 159	2 550	*250	(D)	(D)	15
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	7	77	1 974	(D)	(D)	4 018	1 064	(D)	(D)	13	(D)
1793	Glass and glazing work	(S)	120	3 288	12 909	(D)	6 038	4 597	(D)	(D)	13	(D)
1794	Excavation work	(S)	(S)	4 822	19 950	18 241	(S)	*6 566	*1 709	*835	(S)	27
1795	Wrecking and demolition work	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c.	12	205	2 916	8 734	8 535	6 944	1 593	199	(D)	(Z)	(Z)
1799	Special trade contractors, n.e.c.	97	638	17 077	52 342	49 305	33 016	16 873	3 037	827	13	13
	New York, NY PMSA											
15,16,17	Construction industries	12 358	109 208	3 729 636	14 477 032	10 612 957	7 104 953	3 877 610	3 864 074	119 089	1	1
	(See appropriate State for SIC detail.)											
	Newark, NJ PMSA											
15,16,17	Construction industries	4 737	30 728	994 606	3 889 810	3 123 797	2 026 165	1 151 210	766 012	46 706	1	1
	(See appropriate State for SIC detail.)											
	Newburgh, NY—PA PMSA											
15,16,17	Construction industries	1 035	3 891	101 839	415 465	350 342	206 446	146 555	65 123	6 561	3	4
	(See appropriate State for SIC detail.)											

CONSTRUCTION—GEOGRAPHIC AREA SERIES

CONNECTICUT CT—19

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	Stamford–Norwalk, CT PMSA											
15,16, 17	Construction industries	987	6 211	183 104	1 076 075	620 111	355 313	276 985	455 964	(S)	2	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	216	1 031	25 096	136 642	(D)	55 385	42 944	(D)	930	6	(D)
1522	Other residential buildings	*16	*30	*553	1 925	1 514	(D)	*420	411	(D)	46	39
1531	Operative builders	39	(S)	6 015	76 154	53 607	*37 373	(S)	(S)	134	(S)	35
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c.	(S)	(S)	(S)	364 665	95 790	(D)	87 338	268 876	(S)	(S)	1
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	10	114	3 510	11 125	10 552	7 680	(S)	573	(D)	30	18
1629	Heavy construction, n.e.c.	*19	117	3 323	10 746	9 951	7 214	2 798	796	*337	21	22
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	152	825	25 392	80 683	75 005	43 767	31 270	5 677	*884	9	6
1721	Painting and paper hanging	71	302	5 855	14 827	13 741	11 067	2 674	1 086	206	10	10
1731	Electrical work	121	554	18 534	49 142	48 750	(D)	18 865	392	*283	9	10
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	44	(S)	(S)	(S)	(S)	(S)	3 650	(S)	(S)	(S)	(S)
1742	Plastering, drywall, and insulation work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	312	(S)	(S)	(S)
1743	Terrazzo, tile, marble, and mosaic work	*15	*37	*1 117	(S)	(S)	(S)	(S)	(S)	(D)	42	(S)
175	Carpentry and floor work:											
1751	Carpentry	(S)	(S)	4 540	16 250	(S)	9 845	(S)	1 843	(S)	(S)	(S)
1752	Floor laying and other floor work	12	42	1 296	6 860	6 087	5 385	1 158	*774	*81	22	34
1761	Roofing, siding, and sheet metal work	33	(S)	(S)	(S)	(S)	(S)	(S)	*1 364	(D)	(S)	(S)
1771	Concrete work	11	58	2 097	5 735	(D)	2 700	3 116	(D)	(S)	(Z)	(D)
1781	Water well drilling	4	12	188	846	810	365	445	36	(D)	(Z)	(Z)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	(S)	(D)
1793	Glass and glazing work	5	46	1 205	(D)	4 204	2 947	1 508	(D)	(D)	(Z)	(Z)
1794	Excavation work	29	207	6 483	(D)	(D)	16 463	(S)	(S)	(S)	22	(D)
1795	Wrecking and demolition work	3	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1796	Installing building equipment, n.e.c.	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1799	Special trade contractors, n.e.c.	(S)	328	9 049	26 628	24 403	15 903	9 143	2 225	(S)	12	9
	Trenton, NJ PMSA											
15,16, 17	Construction industries	691	4 984	137 822	746 410	524 888	345 956	195 957	221 522	5 847	2	1

(See appropriate State for SIC detail.)

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	Waterbury, CT PMSA											
15,16,17	Construction industries	569	2 891	84 490	307 681	254 285	158 646	101 436	53 396	4 683	6	6
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	100	237	4 749	23 885	(D)	8 896	8 296	(D)	(S)	26	(D)
1522	Other residential buildings	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(S)	—	(S)	(S)
1531	Operative builders	*11	*21	*584	(D)	(D)	*880	*965	(D)	(D)	74	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	*15	(S)	(S)	(D)	(D)	(S)	*1 930	(D)	—	(S)	(D)
1542	Nonresidential buildings, n.e.c.	27	182	4 767	30 818	12 996	4 357	8 676	17 822	(S)	29	24
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	3	(D)	2 283	8 273	7 468	6 726	(D)	805	(D)	(D)	(Z)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	15	153	5 013	15 560	14 409	12 049	2 440	1 151	*222	19	7
1629	Heavy construction, n.e.c.	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	179	(S)	(S)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	73	552	18 591	55 290	50 163	29 295	24 313	5 127	809	12	10
1721	Painting and paper hanging	39	71	1 299	4 820	4 739	3 906	833	*81	*146	34	28
1731	Electrical work	48	331	10 845	31 294	29 614	19 615	10 709	1 680	314	15	12
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	35	72	*1 461	*5 230	*5 190	*4 043	(D)	(S)	(D)	38	43
1742	Plastering, drywall, and insulation work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1743	Terrazzo, tile, marble, and mosaic work	—	—	—	—	—	—	—	—	—	—	—
175	Carpentry and floor work:											
1751	Carpentry	69	175	3 759	12 236	11 741	7 166	4 911	*495	(D)	31	33
1752	Floor laying and other floor work	(S)	(S)	(S)	(D)	(S)	(S)	(S)	(D)	(D)	(S)	(S)
1761	Roofing, siding, and sheet metal work	41	291	8 481	24 404	22 800	13 320	9 481	1 603	480	22	17
1771	Concrete work	9	115	3 723	12 272	9 871	8 465	1 436	*2 401	1 182	28	31
1781	Water well drilling	—	—	—	—	—	—	—	—	—	—	—
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1793	Glass and glazing work	*9	*25	*638	*2 590	*2 590	*1 336	*1 441	—	—	47	47
1794	Excavation work	30	137	3 921	(D)	(D)	10 947	(S)	(D)	*41	27	(D)
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c.	3	69	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c.	*17	175	5 739	17 246	(D)	(D)	(D)	(D)	(D)	17	(D)
	HARTFORD, CT MSA											
15,16,17	Construction industries	3 091	22 380	696 481	2 814 684	2 209 178	1 477 782	774 787	605 506	35 949	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	545	1 446	29 256	180 510	124 219	62 937	64 078	56 291	(S)	8	9
1522	Other residential buildings	20	145	3 521	(D)	14 414	8 163	6 448	(D)	(D)	29	6
1531	Operative builders	77	313	10 305	88 456	60 354	(D)	22 498	28 103	680	17	13
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(S)	(S)	17 940	(S)	(S)	4 360	11 827	(D)	(S)	(S)
1542	Nonresidential buildings, n.e.c.	155	1 534	50 863	412 241	139 141	78 578	63 412	273 100	1 813	6	6

CONSTRUCTION—GEOGRAPHIC AREA SERIES

CONNECTICUT CT–21

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	HARTFORD, CT MSA—Con.											
15,16, 17	Construction industries—Con.											
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	76	2 171	74 996	353 591	276 514	121 684	158 528	77 078	14 643	2	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	17	462	16 283	53 400	44 665	29 198	15 675	8 735	849	4	6
1623	Water, sewer, and utility lines -----	40	547	18 310	48 951	(D)	29 994	15 187	(D)	776	7	(D)
1629	Heavy construction, n.e.c. -----	43	2 881	(D)	(D)	(D)	(D)	17 391	26 122	1 769	2	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	431	2 840	87 342	274 732	241 354	144 492	100 875	33 379	3 226	5	3
1721	Painting and paper hanging-----	181	678	16 705	(D)	(D)	32 814	9 850	2 122	752	11	(D)
1731	Electrical work -----	298	1 976	59 198	184 449	177 978	98 388	79 997	6 472	1 961	5	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	175	1 243	32 679	89 097	84 100	(D)	29 691	4 997	403	12	9
1742	Plastering, drywall, and insulation work -----	100	678	19 100	52 003	47 766	31 313	16 492	4 237	659	6	6
1743	Terrazzo, tile, marble, and mosaic work -----	19	72	2 044	*7 941	*7 857	*4 482	*3 393	84	36	30	42
175	Carpentry and floor work:											
1751	Carpentry -----	227	625	13 384	49 681	44 825	27 031	17 811	4 856	547	10	11
1752	Floor laying and other floor work ---	55	363	(D)	40 992	(D)	21 195	16 391	(D)	(D)	22	(D)
1761	Roofing, siding, and sheet metal work -----	130	1 001	30 761	98 422	90 026	(D)	36 874	8 396	1 044	4	4
1771	Concrete work -----	143	504	(D)	(D)	(D)	20 740	(S)	(S)	(S)	15	(D)
1781	Water well drilling -----	8	36	1 010	3 170	3 066	1 438	1 628	104	(D)	16	14
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	38	404	11 893	44 774	(D)	13 853	23 576	(D)	595	15	(D)
1793	Glass and glazing work -----	21	81	2 017	7 796	(D)	4 265	3 318	(D)	*34	23	(D)
1794	Excavation work -----	96	829	25 533	87 926	76 378	(D)	22 674	11 547	2 690	3	4
1795	Wrecking and demolition work -----	3	19	435	1 213	(D)	1 071	90	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c. -	14	253	11 088	(D)	(D)	21 493	5 287	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c. ----	161	1 131	30 952	99 331	83 435	(D)	27 227	15 895	757	6	7

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Maine

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Maine. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 15,960 establishments in this State operating in the construction industries. These establishments accounted for \$2.3 billion in total dollar value of business done.

Most of the 15,960 construction establishments were small. Of the total, 11,967 were nonemployers, and over half of the employer establishments had less than 5 employees. The 1,106 construction establishments with 5 employees or more, while representing only 7 percent of all establishments, accounted for more than 68 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$2.0 billion in total dollar value of business done. Of this amount, \$1.9 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$379 million, leaving net value of construction work of \$1.6 billion. In addition, these establishments paid out \$747 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$979 million. (See Introduction and appendixes for explanation of terms.)

There were 3,993 establishments with total employment averaging 21,445 during the year. Total payroll for 1992 was \$453 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 11,967 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$310 million. Most of these establishments, about 84 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

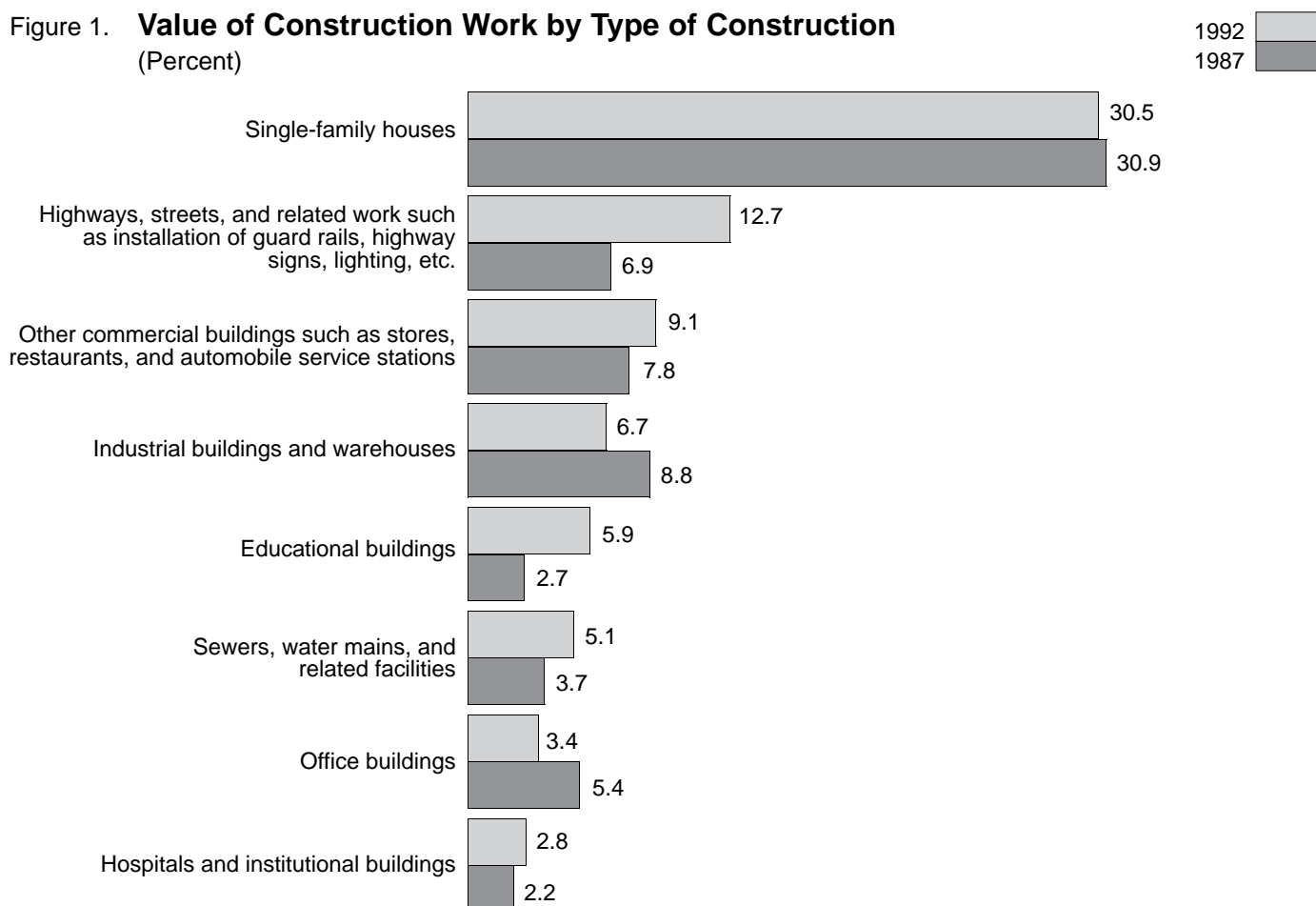


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

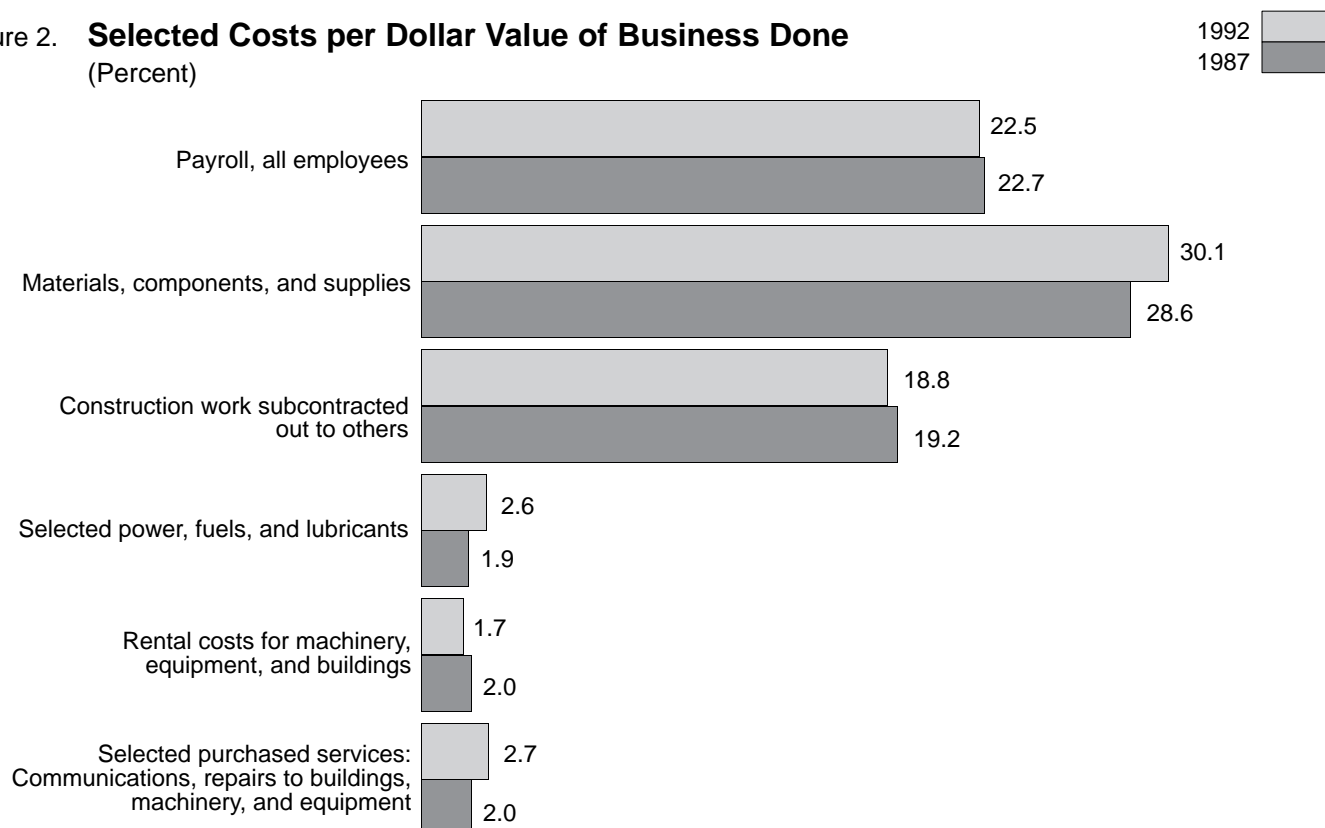


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	15 960	13 794	21 445	2 327 515	11 967	11 869	310 176	3 993	1 925	21 445	2 017 339	2	2
15	Building construction—General contractors and operative builders ----	2 928	2 172	5 169	766 817	1 710	1 623	80 557	1 218	549	5 169	686 260	4	5
16	Heavy construction other than building construction—contractors -----	519	331	4 879	514 677	256	249	8 772	263	(S)	4 879	505 905	3	2
17	Special trade contractors -----	12 512	11 290	11 397	1 046 021	10 001	9 997	220 847	2 511	1 293	11 397	825 174	3	3
1711	Plumbing, heating, and air-conditioning --	1 328	1 050	2 318	232 571	833	817	32 991	495	233	2 318	199 580	5	5
1731	Electrical work -----	1 185	965	1 543	138 275	822	816	19 869	363	149	1 543	118 406	7	7
	1987													
15, 16, 17	Construction industries² -----	16 008	12 957	32 706	3 356 436	11 583	11 498	554 644	4 425	1 459	32 706	2 801 792	2	2
15	Building construction—General contractors and operative builders ----	3 372	2 231	9 948	1 236 365	1 910	1 822	141 369	1 462	409	9 948	1 094 996	3	3
16	Heavy construction other than building construction—contractors -----	548	(D)	(D)	(D)	244	244	15 584	304	(D)	(D)	(D)	(D)	(D)
17	Special trade contractors -----	11 683	10 077	15 062	1 276 194	9 065	9 108	291 613	2 618	969	15 062	984 581	3	3
1711	Plumbing, heating, and air-conditioning --	1 114	800	2 875	250 606	693	692	35 817	421	108	2 875	214 789	5	5
1731	Electrical work -----	999	758	2 065	153 286	644	643	21 701	355	115	2 065	131 585	5	5

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹-----	3 993	21 445	16 585	453 040	334 492	1 949 900	1 571 233	979 122
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses-----	940	3 367	2 459	55 805	40 156	320 310	237 240	133 678
1522	Other residential buildings-----	46	116	95	1 457	980	8 749	6 616	3 854
1531	Operative builders-----	61	259	148	6 087	2 916	81 904	57 089	34 024
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses-----	50	400	306	9 484	6 295	50 302	31 433	18 412
1542	Nonresidential buildings, n.e.c.-----	121	1 028	738	25 859	16 261	209 698	91 410	52 503
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction-----	70	2 691	2 168	72 449	55 427	234 715	202 932	142 760
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction-----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines-----	38	642	498	17 224	12 420	76 519	60 142	42 683
1629	Heavy construction, n.e.c.-----	153	1 452	1 160	34 874	27 384	155 056	127 181	84 988
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning-----	495	2 318	1 607	52 208	35 548	191 826	172 185	107 541
1721	Painting and paper hanging-----	171	586	482	8 636	7 169	25 514	24 616	18 420
1731	Electrical work-----	363	1 543	1 192	35 347	26 512	113 860	110 485	64 717
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework-----	154	557	477	9 723	(D)	(D)	30 441	21 488
1742	Plastering, drywall, and insulation work-----	73	621	482	12 871	9 041	38 637	35 909	20 024
1743	Terrazzo, tile, marble, and mosaic work-----	6	(D)	11	*172	*111	*632	*632	*330
175	Carpentry and floor work:								
1751	Carpentry-----	369	983	840	16 370	14 253	76 178	68 583	41 294
1752	Floor laying and other floor work-----	68	193	144	3 409	2 595	14 674	13 510	9 033
1761	Roofing, siding, and sheet metal work-----	125	746	604	16 429	11 363	58 014	56 732	30 318
1771	Concrete work-----	245	1 162	982	21 968	17 434	83 865	79 142	47 355
1781	Water well drilling-----	55	213	171	4 071	3 427	18 658	18 429	10 250
179	Miscellaneous special trade contractors:								
1791	Structural steel erection-----	7	(D)	58	*1 797	*1 458	*4 375	*4 375	*2 690
1793	Glass and glazing work-----	11	38	23	799	400	3 338	3 329	1 394
1794	Excavation work-----	227	1 185	935	23 770	18 495	87 175	82 694	56 416
1795	Wrecking and demolition work-----	3	(S)	(S)	(S)	(S)	(S)	(D)	(S)
1796	Installing building equipment, n.e.c.-----	23	409	328	6 172	4 848	13 896	13 475	10 709
1799	Special trade contractors, n.e.c.-----	116	746	(D)	(D)	10 100	38 567	(D)	(D)

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
659 550	378 667	428 976	33 824	47 760	549 794	32 706	2 701 081	1 374 526	2	2	5	15, 16, 17
												15
110 677	83 070	19 436	3 446	4 124	36 574	5 468	421 697	171 027	6	6	28	152
3 026	2 133	538	68	*86	408	787	103 294	33 702	28	27	56	1521
23 367	24 815	(S)	*952	*402	2 605	765	145 632	(D)	26	28	63	1531
(D)	18 869	(S)	776	(D)	12 935	385	66 774	13 692	11	7	(D)	154
46 369	118 289	*8 153	1 750	713	17 580	2 563	317 027	91 723	11	9	30	1541
												1542
												16
79 267	31 783	59 004	6 988	10 532	121 212	2 152	192 991	106 208	3	4	10	1611
(D)	(D)	184	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	162
22 178	16 377	24 837	1 259	2 916	44 189	932	103 797	61 580	7	6	5	1622
46 254	27 875	26 636	5 761	12 841	92 285	4 236	354 726	242 682	9	7	7	1623
												1629
												17
72 399	19 641	68 858	3 566	1 910	27 356	2 875	206 533	109 869	5	5	25	1711
6 428	898	10 839	768	615	3 797	1 218	39 157	31 023	11	10	19	1721
50 314	3 375	48 448	869	*1 136	10 897	2 065	131 004	76 734	7	6	44	1731
8 991	(D)	15 384	515	*857	12 076	1 103	48 684	34 530	14	14	46	174
16 678	(S)	33 520	*429	*22	5 684	1 522	106 069	76 901	16	15	42	1741
305	—	(D)	—	(D)	41	109	8 854	3 627	(D)	45	(D)	1742
												1743
27 426	7 595	14 383	725	1 040	7 860	1 628	101 329	53 604	11	12	24	175
(D)	1 164	8 476	177	127	2 986	158	12 458	7 682	9	9	20	1751
26 626	1 282	24 702	651	*667	11 843	943	65 868	39 295	12	11	51	1752
31 787	4 724	26 472	741	2 374	33 740	1 086	65 415	35 026	9	9	19	1761
8 320	229	1 042	*357	*764	*27 220	181	15 591	11 403	29	24	45	1771
												1781
*1 685	—	(S)	(S)	(S)	(D)	37	2 308	1 455	(D)	51	(S)	179
2 380	9	2 422	170	(D)	(D)	37	3 692	1 496	(Z)	(Z)	(D)	1791
32 550	4 481	22 100	2 728	5 279	62 690	1 273	95 173	65 318	12	11	26	1793
(S)	(D)	(D)	(D)	(D)	(D)	(S)	(D)	*1 096	(S)	(D)	(D)	1794
(D)	421	2 296	171	*210	2 126	150	14 951	9 563	6	9	44	1795
17 976	(D)	6 651	638	*436	7 812	637	40 391	26 592	15	(D)	45	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	3 993	4 425	2 696	3 312	1	1	3	4
Proprietors and working partners.....	1 925	1 459	1 135	1 974	3	6	6	7
All employees**	21 445	32 706	17 490	19 606	2	2	3	2
Construction workers:								
March.....	12 410	22 417	11 024	13 472	2	2	3	3
May	16 792	27 470	14 690	18 310	2	2	2	3
August	19 802	30 640	16 970	19 407	2	2	3	2
November.....	17 336	26 590	15 354	16 476	2	2	4	2
Average	16 585	26 779	14 789	16 930	2	2	2	2
Other employees:								
March.....	4 745	6 078	2 641	3 155	3	7	4	3
May	4 812	5 771	(NA)	(NA)	3	2	(NA)	(NA)
August	4 825	5 988	(NA)	(NA)	3	2	(NA)	(NA)
November.....	5 059	5 867	(NA)	(NA)	3	3	(NA)	(NA)
Average	4 860	5 926	(NA)	(NA)	3	3	(NA)	(NA)
Payroll, all employees	453 040	636 884	251 290	191 037	1	1	2	2
Payroll, construction workers	334 492	488 532	201 362	158 830	1	1	2	2
Payroll, other employees	118 548	148 352	49 928	32 207	2	2	3	3
First-quarter payroll, all employees	86 446	130 758	48 830	37 372	2	2	2	2
Fringe benefits, all employees	107 728	145 534	47 285	31 520	2	1	2	2
Legally required expenditures.....	77 721	106 063	36 695	23 163	3	2	3	2
Voluntary expenditures.....	30 008	39 470	10 590	8 356	4	2	3	2
Dollar value of business done	2 017 339	2 801 792	1 015 302	736 249	2	2	2	2
Value of construction work	1 949 900	2 701 081	985 663	705 930	2	2	2	2
Value of construction work subcontracted in from others	428 976	605 725	180 370	140 972	5	7	5	3
Other business receipts	67 439	64 188	25 476	30 320	6	5	6	5
Net value of construction†	1 571 233	2 164 313	805 037	587 401	2	2	2	2
Value added††	979 122	1 374 526	486 011	344 809	2	3	2	2
Selected costs	1 038 216	1 390 743	525 127	387 474	3	2	3	3
Materials, components, and supplies	607 730	801 561	315 710	250 647	2	2	2	3
Construction work subcontracted out to others	378 667	536 767	180 625	118 528	4	3	4	5
Selected power, fuels, and lubricants	51 819	52 414	28 791	18 299	3	2	3	3
Electricity.....	7 131	6 397	3 290	1 814	6	3	3	6
Natural gas	1 223	940	546	295	8	9	18	23
Gasoline and diesel fuel	37 769	40 882	23 058	14 202	3	3	4	3
On highway use.....	25 883	28 474	(NA)	(NA)	3	3	(NA)	(NA)
Off highway use.....	11 886	12 408	(NA)	(NA)	5	3	(NA)	(NA)
Other, including lubricating oils and greases.....	5 696	4 193	1 896	1 988	5	5	5	8
Rental cost for machinery, equipment, and buildings	33 824	55 706	23 769	10 391	6	3	2	2
For machinery and equipment	22 885	45 034	21 113	8 971	8	4	2	3
For buildings.....	10 939	10 671	2 656	1 421	8	6	8	6
Selected purchased services	53 859	55 607	23 718	19 728	6	3	4	3
Communication services	12 598	11 127	4 763	3 906	10	4	4	6
Repairs to buildings and other structures	1 791	4 840	1 141	667	14	10	9	14
Repairs to machinery and equipment	39 471	39 639	17 814	15 155	6	4	4	3
Ownership of construction projects:								
Value of construction work	1 949 900	2 701 081	985 663	705 930	2	2	2	2
Government owned	534 025	468 953	282 934	148 764	4	4	6	1
Federal	91 590	168 760	(NA)	(NA)	9	7	(NA)	(NA)
State and local	442 435	300 192	(NA)	(NA)	4	5	(NA)	(NA)
Privately owned	1 415 875	2 232 127	702 728	557 166	4	3	3	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	521 735	481 358	5	5
Capital expenditures, other than land -----	47 760	89 436	5	6
New -----	35 083	74 387	4	6
Used -----	12 676	15 049	13	15
Retirements and disposition of depreciable assets -----	19 701	25 466	11	18
End-of-year gross book value of depreciable assets -----	549 794	545 329	5	4
Depreciation charges during year -----	58 229	65 430	6	5
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	62 858	80 095	12	9
Capital expenditures, other than land -----	3 519	11 445	11	12
New buildings and other structures -----	2 918	8 024	8	12
Used buildings and other structures -----	(S)	3 420	(S)	29
Retirements and disposition of depreciable assets -----	*1 772	1 441	67	27
End-of-year gross book value of depreciable assets -----	64 604	90 099	12	9
Depreciation charges during year -----	6 927	8 458	23	14
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	458 878	401 263	6	5
Capital expenditures, other than land -----	44 241	77 991	5	7
New machinery and equipment, including automobiles and trucks -----	32 166	66 362	5	7
New automobiles and trucks, intended primarily for highway use -----	10 357	31 745	10	10
Used machinery and equipment, including automobiles and trucks -----	12 075	11 629	13	18
Retirements and disposition of depreciable assets -----	17 928	24 025	10	19
End-of-year gross book value of depreciable assets -----	485 190	455 229	5	5
Depreciation charges during year -----	51 302	56 971	6	5

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	3 993	1
Value of construction work	1 949 900	2
Establishments with inventories:		
Number	1 401	4
Value of construction work	1 005 776	2
Inventories ¹ :		
End of 1992, materials and supplies	32 676	12
End of 1991, materials and supplies	35 850	9
Establishments with no inventories:		
Number	1 273	5
Value of construction work	624 186	4
Establishments not reporting:		
Number	1 319	4
Value of construction work	319 939	6

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	3 993	2 886	623	324	122	25	10	1	—	1
All employees** -----	21 445	5 160	3 947	4 221	3 442	1 645	3 032	(D)	—	(D)
Payroll, all employees -----	453 040	78 494	74 711	96 337	81 798	42 036	79 664	(D)	—	(D)
Dollar value of business done -----	2 017 339	424 014	322 697	452 892	358 359	182 716	276 660	(D)	—	(D)
Value of construction work -----	1 949 900	416 135	312 949	441 394	341 345	175 700	262 377	(D)	—	(D)
Net value of construction work† -----	1 571 233	362 845	262 108	339 122	251 812	135 038	220 309	(D)	—	(D)
Value added†† -----	979 122	217 161	156 500	208 503	159 151	86 681	151 126	(D)	—	(D)
Cost of materials, components, supplies, and fuels -----	659 550	153 563	115 356	142 117	109 675	55 372	83 466	(D)	—	(D)
Cost of construction work subcontracted out to others -----	378 667	53 290	50 841	102 271	89 533	40 663	42 068	(D)	—	(D)
Rental cost for machinery, equipment, and buildings -----	33 824	5 913	5 899	6 033	7 215	3 380	5 383	(D)	—	(D)
Capital expenditures, other than land -----	47 760	6 758	5 719	6 831	7 216	5 411	15 825	(D)	—	(D)
End-of-year gross book value of depreciable assets -----	549 794	99 657	76 537	76 230	108 055	75 723	113 592	(D)	—	(D)
1987										
All employees** -----	32 706	(S)	6 572	4 424	6 603	3 204	2 771	3 465	—	(D)
Value of construction work -----	2 701 081	(S)	454 126	338 827	571 188	329 913	556 586	(D)	—	(D)
Value added†† -----	1 374 526	(S)	251 744	178 188	263 499	147 546	126 537	194 532	—	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	2	5	9	7	5	5	(Z)	(D)	—	(D)
Net value of construction work† -----	2	6	9	7	4	4	(Z)	(D)	—	(D)
Capital expenditures, other than land -----	5	16	25	19	8	(Z)	(Z)	(D)	—	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	3 993	(S)	(S)	702	1 262	693	357	255	73	31	19
All employees** -----	21 445	(S)	(S)	1 072	2 965	3 217	3 323	3 770	2 169	1 180	3 276
Payroll, all employees -----	453 040	(S)	(S)	12 883	45 088	57 260	62 797	90 690	55 067	30 782	94 577
Dollar value of business done -----	2 017 339	(S)	(S)	51 085	199 433	245 501	251 527	403 573	241 264	200 914	408 030
Value of construction work -----	1 949 900	(S)	(S)	50 229	195 530	238 867	242 264	388 645	237 183	194 212	387 091
Net value of construction work† -----	1 571 233	(S)	(S)	47 523	178 258	215 145	211 070	313 596	190 511	113 492	287 035
Value added†† -----	979 122	(S)	(S)	28 936	107 788	130 386	135 547	185 566	114 081	74 527	193 661
Cost of materials, components, supplies, and fuels -----	659 550	(S)	(S)	19 443	74 373	91 393	84 786	142 957	80 511	45 667	114 313
Cost of construction work subcontracted out to others -----	378 667	(S)	(S)	2 706	17 272	23 723	31 194	75 050	46 672	80 720	100 056
Rental cost for machinery, equipment, and buildings -----	33 824	(S)	(S)	514	2 798	4 838	2 702	5 897	6 658	3 069	7 086
Capital expenditures, other than land -----	47 760	(S)	(S)	1 136	2 815	5 507	3 291	6 789	5 956	3 049	18 774
End-of-year gross book value of depreciable assets -----	549 794	(S)	(S)	(S)	48 412	103 667	19 544	86 236	82 722	48 492	147 887
1987											
All employees** -----	32 706	(S)	(S)	(S)	(S)	4 165	4 090	5 658	3 576	2 427	6 299
Value of construction work -----	2 701 081	(S)	(S)	(S)	(S)	281 872	302 896	464 032	360 255	300 147	691 462
Value added†† -----	1 374 526	(S)	(S)	(S)	(S)	142 123	169 048	229 517	196 028	125 721	346 895
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	(S)	(S)	11	8	9	9	7	4	7	(Z)
Net value of construction work† -----	2	(S)	(S)	9	7	9	9	8	6	8	(Z)
Capital expenditures, other than land -----	5	(S)	(S)	28	25	25	28	18	12	4	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

ME-10 MAINE

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 949 900	936 444	555 048	329 790	2	3	3	3
Building construction	1 236 155	686 348	327 801	222 006	3	4	4	5
Single-family houses	594 287	355 437	141 631	97 218	5	8	6	8
Single-family houses, detached	567 628	336 628	137 666	93 334	5	8	6	9
Single-family houses, attached, including townhouses and townhouse-type condominiums	26 659	18 810	3 966	3 883	23	31	20	22
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	42 862	23 864	10 704	8 294	11	17	18	16
Other residential buildings, including hotels, motels, and tourist cabins.....	14 431	5 109	4 925	4 397	14	21	23	24
Office buildings	66 781	33 256	22 231	11 295	8	9	13	14
Other commercial buildings such as stores, restaurants, and automobile service stations	176 535	109 769	43 234	23 532	7	7	16	11
Industrial buildings and warehouses	131 609	56 305	38 253	37 051	5	7	8	8
Industrial buildings	111 184	43 411	33 766	34 007	5	8	9	8
Warehouses	20 425	12 895	4 487	3 043	10	10	14	21
Educational buildings	115 613	52 829	36 619	26 164	8	6	18	9
Hospitals and institutional buildings	55 335	29 923	21 437	3 976	9	9	13	12
Other nonresidential buildings	38 701	19 855	8 766	10 081	15	27	17	5
Nonbuilding construction.....	585 128	250 097	227 247	107 784	2	4	3	5
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	247 103	64 499	147 705	34 899	3	7	3	7
Private driveways and parking areas	23 632	16 220	3 326	4 085	15	17	13	23
Bridges, tunnels, and elevated highways	16 192	8 033	7 245	914	(Z)	(Z)	(Z)	2
Marine construction	14 115	(D)	(D)	2 906	19	(D)	(D)	38
Conservation and development construction	46 692	37 363	8 475	(S)	13	15	24	(S)
Power and communication transmission lines, towers, and related facilities.....	12 527	(D)	(D)	838	31	34	35	16
Sewers, water mains, and related facilities.....	100 195	65 039	22 184	12 972	5	6	8	7
Sewers, sewer lines, septic systems, and related facilities	70 106	47 416	17 119	5 572	5	6	6	13
Water mains and related facilities.....	30 088	17 623	5 065	(S)	7	8	19	(S)
Blast furnaces, petroleum refineries, chemical complexes, etc.	38 086	9 280	5 686	23 119	4	4	2	4
Power plants	17 708	(D)	(D)	13 290	17	(D)	(D)	22
Sewage treatment and water treatment plants	25 139	20 881	2 275	1 983	5	2	9	35
Sewage treatment plants	13 142	11 951	632	*559	3	1	10	57
Water treatment plants	11 997	8 930	1 643	*1 424	10	5	12	43
Other nonbuilding construction	43 739	12 956	18 861	11 923	10	20	10	15
Construction work, n.s.k.	128 617	(NA)	(NA)	(NA)	11	(NA)	(NA)	(NA)
1987								
Value of construction work	2 701 081	1 619 158	638 636	297 264	2	3	2	3
Building construction	1 794 860	1 196 541	408 080	172 640	3	4	3	4
Single-family houses	833 750	613 394	144 946	75 409	4	5	6	7
Single-family houses, detached	664 039	459 488	134 461	70 089	4	6	7	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	169 710	153 905	10 484	5 320	10	10	14	21
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	93 140	68 853	16 707	7 579	8	10	18	20
Other residential buildings, including hotels, motels, and tourist cabins.....	96 320	63 028	22 649	10 642	10	13	13	18
Office buildings	146 106	103 235	34 132	8 738	4	4	9	6
Other commercial buildings such as stores, restaurants, and automobile service stations	209 542	125 890	65 609	18 042	4	4	9	11
Industrial buildings and warehouses	236 367	152 031	46 439	37 896	11	16	4	9
Industrial buildings	183 697	115 566	32 562	35 567	13	20	6	9
Warehouses	52 670	36 465	13 876	2 329	8	11	3	11
Educational buildings	72 262	33 310	34 042	4 909	9	8	15	9
Hospitals and institutional buildings	59 104	27 420	26 888	4 795	8	13	8	9
Other nonresidential buildings	48 269	21 639	19 116	7 521	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction.....	760 200	410 358	228 108	121 734	2	3	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	186 478	100 465	54 514	31 498	6	7	7	7
Private driveways and parking areas	16 877	12 543	*2 045	2 287	21	23	46	37
Power and communication transmission lines, towers, and related facilities.....	23 750	15 653	5 446	2 650	12	16	8	15
Sewers, water mains, and related facilities.....	100 986	75 339	16 269	9 377	6	6	9	14
Sewers, sewer lines, septic systems, and related facilities	63 519	49 328	8 182	6 008	5	5	6	20
Water mains and related facilities.....	37 466	26 010	8 087	3 368	12	14	15	14
Power plants	99 770	75 256	2 557	21 956	(Z)	(Z)	1	(Z)
Sewage treatment and water treatment plants	14 476	13 645	441	389	8	8	(Z)	8
Other nonbuilding construction	317 863	117 457	146 836	53 577	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	146 021	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	3 993	16 585	12 410	16 792	19 802	17 336	1	2	2	2	2	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	940	2 459	2 079	2 550	2 870	2 338	4	6	7	6	6	6
1522	Other residential buildings -----	46	95	78	90	136	75	34	33	37	33	36	36
1531	Operative builders -----	61	148	94	175	187	137	25	33	37	31	34	34
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	50	306	176	202	410	433	31	12	17	15	15	7
1542	Nonresidential buildings, n.e.c. ----	121	738	632	716	778	825	16	12	11	13	13	13
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	70	2 168	1 481	2 296	2 525	2 371	13	3	2	3	3	4
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	3	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	38	498	331	519	598	544	24	7	8	7	9	9
1629	Heavy construction, n.e.c. -----	153	1 160	731	1 104	1 511	1 294	16	9	12	9	10	9
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	495	1 607	1 382	1 581	1 876	1 589	4	5	5	5	4	6
1721	Painting and paper hanging -----	171	482	329	462	614	524	8	11	12	11	12	15
1731	Electrical work -----	363	1 192	1 088	1 098	1 355	1 227	5	7	8	7	9	8
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	154	477	359	502	564	481	9	13	15	14	13	14
1742	Plastering, drywall, and insulation work -----	73	482	452	490	459	526	18	15	14	14	17	15
1743	Terrazzo, tile, marble, and mosaic work -----	6	11	*10	11	11	*10	24	39	42	39	39	42
175	Carpentry and floor work:												
1751	Carpentry -----	369	840	659	844	1 015	840	6	10	11	10	11	11
1752	Floor laying and other floor work --	68	144	149	149	150	129	15	12	14	11	12	13
1761	Roofing, siding, and sheet metal work -----	125	604	471	582	694	671	15	13	10	13	13	14
1771	Concrete work -----	245	982	473	1 098	1 351	1 008	9	9	10	10	9	10
1781	Water well drilling -----	55	171	153	173	178	180	20	28	28	28	27	27
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	7	58	(S)	58	74	60	35	37	(S)	36	31	37
1793	Glass and glazing work -----	11	23	22	21	23	25	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1794	Excavation work -----	227	935	540	1 037	1 224	937	12	12	15	12	12	12
1795	Wrecking and demolition work -----	3	(S)	(S)	(S)	(S)	(S)	(Z)	(S)	(S)	(S)	(S)	(S)
1796	Installing building equipment, n.e.c. -----	23	328	215	301	369	425	34	8	7	9	7	6
1799	Special trade contractors, n.e.c. ----	116	(D)	(D)	(D)	(D)	(D)	16	(D)	(D)	(D)	(D)	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	5.4	21.1	117.6	.232	.338	.194	.220	.017
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.6	16.6	130.3	.174	.346	.259	.061	.011
1522	Other residential buildings -----	2.5	12.6	92.1	.167	.346	.244	*.061	.008
1531	Operative builders -----	4.3	23.5	553.4	.074	.285	.303	(S)	*.012
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	8.0	23.7	164.4	.189	(D)	.375	(S)	.015
1542	Nonresidential buildings, n.e.c. -----	8.5	25.2	284.1	.123	.221	.564	*.039	.008
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	38.7	26.9	108.3	.309	.338	.135	.251	.030
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	16.9	26.8	153.7	.225	.290	.214	.325	.016
1629	Heavy construction, n.e.c. -----	9.5	24.0	133.7	.225	.298	.180	.172	.037
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	4.7	22.5	119.4	.272	.377	.102	.359	.019
1721	Painting and paper hanging -----	3.4	14.7	52.9	.338	.252	.035	.425	.030
1731	Electrical work -----	4.2	22.9	95.5	.310	.442	.030	.426	.008
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	3.6	17.5	(D)	(D)	(D)	(D)	(D)	(D)
1742	Plastering, drywall, and insulation work -----	8.5	20.7	80.2	.333	.432	(S)	.868	*.011
1743	Terrazzo, tile, marble, and mosaic work -----	(D)	(D)	57.5	.272	.483	—	(D)	—
175	Carpentry and floor work:								
1751	Carpentry -----	2.7	16.7	90.7	.215	.360	.100	.189	.010
1752	Floor laying and other floor work -----	2.8	17.7	101.9	.232	(D)	.079	.578	.012
1761	Roofing, siding, and sheet metal work -----	6.0	22.0	96.0	.283	.459	.022	.426	.011
1771	Concrete work -----	4.7	18.9	85.4	.262	.379	.056	.316	.009
1781	Water well drilling -----	3.9	19.1	109.1	.218	.446	.012	.056	*.019
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	(D)	(D)	75.4	.411	.385	—	(S)	(S)
1793	Glass and glazing work -----	3.5	21.0	145.1	.239	.713	.003	.725	.051
1794	Excavation work -----	5.2	20.1	93.2	.273	.373	.051	.254	.031
1795	Wrecking and demolition work -----	(S)	(S)	(S)	(S)	(S)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	17.8	15.1	42.4	.444	(D)	.030	.165	.012
1799	Special trade contractors, n.e.c. -----	6.4	(D)	(D)	(D)	.466	(D)	.172	.017

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON–WORCESTER–LAWRENCE, MA–NH–ME–CT CMSA											
15,16,17	Construction industries	12 243	81 838	2 373 923	10 850 651	7 795 632	4 779 944	3 171 595	3 055 019	114 237	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	5 708	110 750	706 759	493 053	242 509	263 814	213 705	6 606	5	5
1522	Other residential buildings	175	813	22 429	112 671	72 527	46 531	29 106	40 144	807	13	12
1531	Operative builders	385	1 578	44 821	682 250	442 959	218 538	236 385	239 291	2 619	7	14
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	156	1 029	32 600	206 537	101 940	73 206	30 157	104 597	(S)	10	6
1542	Nonresidential buildings, n.e.c.	661	7 636	251 621	2 297 588	792 724	406 931	422 836	1 504 864	8 797	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	186	2 376	76 098	351 410	283 480	167 496	119 003	67 930	9 828	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	29	1 356	61 789	459 022	308 945	202 177	108 555	150 077	6 415	3	1
1623	Water, sewer, and utility lines	240	2 825	88 879	361 351	287 073	179 918	113 000	74 277	13 030	5	4
1629	Heavy construction, n.e.c.	265	5 716	231 386	916 111	708 579	507 539	208 904	207 533	11 223	1	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 823	11 509	353 357	1 207 486	1 033 712	613 810	435 086	173 774	10 922	2	2
1721	Painting and paper hanging	614	2 761	55 356	148 651	138 536	104 643	34 419	10 115	2 239	5	6
1731	Electrical work	1 468	10 685	339 496	1 016 518	969 186	600 178	382 086	47 332	8 411	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	2 317	51 729	165 144	154 433	107 492	47 573	10 711	1 838	10	5
1742	Plastering, drywall, and insulation work	429	3 271	89 477	287 958	256 401	164 927	94 202	31 557	2 020	9	9
1743	Terrazzo, tile, marble, and mosaic work	74	282	(S)	20 828	20 031	(S)	8 978	*797	(S)	17	12
175	Carpentry and floor work:											
1751	Carpentry	924	3 085	67 890	287 397	237 944	132 041	108 826	49 453	(S)	6	6
1752	Floor laying and other floor work	244	969	21 663	122 958	(D)	51 223	58 862	(D)	829	8	(D)
1761	Roofing, siding, and sheet metal work	431	2 833	71 126	252 638	232 396	138 680	96 777	20 242	(S)	5	5
1771	Concrete work	506	2 796	63 312	229 191	212 292	132 871	80 223	16 899	4 478	6	5
1781	Water well drilling	59	344	10 038	32 704	32 475	20 418	12 117	228	671	13	12
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	97	1 818	58 940	150 435	(D)	103 748	34 133	(D)	2 110	7	(D)
1793	Glass and glazing work	98	527	12 828	41 966	41 197	26 199	18 892	(S)	*174	10	12
1794	Excavation work	417	2 138	55 937	206 929	181 644	135 178	55 880	25 285	5 767	9	8
1795	Wrecking and demolition work	(S)	342	8 672	33 380	29 628	25 313	4 978	3 752	537	2	2
1796	Installing building equipment, n.e.c.	104	2 698	74 030	219 189	212 956	159 611	54 929	6 233	1 411	1	1
1799	Special trade contractors, n.e.c.	502	4 428	111 827	333 580	308 834	206 493	111 877	24 745	8 170	5	5
	Boston, MA–NH PMSA											
15,16,17	Construction industries	6 890	49 004	1 486 300	7 345 622	5 037 835	3 091 565	2 036 809	2 307 788	63 841	1	1
	(See appropriate State for SIC detail.)											
	Brockton, MA PMSA											
15,16,17	Construction industries	545	3 110	82 089	306 915	253 477	165 924	94 379	53 437	3 003	4	3
	(See appropriate State for SIC detail.)											
	Fitchburg–Leominster, MA PMSA											
15,16,17	Construction industries	269	1 302	32 635	128 736	104 319	61 979	46 007	24 417	1 269	10	9
	(See appropriate State for SIC detail.)											
	Lawrence, MA–NH PMSA											
15,16,17	Construction industries	817	5 082	124 320	496 532	402 893	259 128	152 254	93 639	14 205	2	2
	(See appropriate State for SIC detail.)											

ME–14 MAINE

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON–WORCESTER–LAWRENCE, MA–NH–ME–CT CMSA—Con.											
	Lowell, MA–NH PMSA											
15,16, 17	Construction industries	711	4 158	107 067	528 670	419 261	238 826	188 724	109 408	9 495	3	4
	(See appropriate State for SIC detail.)											
	Manchester, NH PMSA											
15,16, 17	Construction industries	504	3 407	87 906	396 764	286 943	157 297	137 693	109 821	4 018	5	5
	(See appropriate State for SIC detail.)											
	Nashua, NH PMSA											
15,16, 17	Construction industries	359	2 564	69 678	304 805	209 941	135 141	90 245	94 864	2 972	3	3
	(See appropriate State for SIC detail.)											
	New Bedford, MA PMSA											
15,16, 17	Construction industries	322	1 346	29 494	120 156	103 574	65 071	39 438	16 582	2 690	9	7
	(See appropriate State for SIC detail.)											
	Portsmouth–Rochester, NH–ME PMSA											
15,16, 17	Construction industries	714	2 907	64 307	262 556	224 525	132 790	96 814	38 030	4 418	7	7
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	538	8 472	45 437	35 262	17 551	18 087	10 175	680	21	20
1522	Other residential buildings	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1531	Operative builders	*20	47	1 136	*15 200	*10 391	*2 394	*7 997	*4 809	(D)	38	55
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	*13	*87	1 929	*9 286	*6 631	*3 829	*2 802	2 655	54	53	47
1542	Nonresidential buildings, n.e.c.	(S)	34	1 141	6 885	2 271	1 445	(S)	(S)	(D)	28	34
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1623	Water, sewer, and utility lines	*12	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
1629	Heavy construction, n.e.c.	*16	98	2 092	11 821	(D)	5 541	3 904	(D)	*759	32	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	(S)	540	14 696	44 988	41 963	27 053	14 987	3 026	(S)	12	11
1721	Painting and paper hanging	21	97	(S)	2 560	2 354	2 074	590	*206	(S)	31	35
1731	Electrical work	76	255	7 383	24 665	24 489	14 432	10 131	177	(D)	21	24
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	*39	*588	(D)	*1 976	*1 204	*777	(D)	(D)	59	46
1742	Plastering, drywall, and insulation work	*12	30	623	2 595	(D)	1 353	1 210	(D)	(D)	25	(D)
1743	Terrazzo, tile, marble, and mosaic work	3	(D)	(S)	*265	*258	*159	*102	*6	(D)	(D)	45
175	Carpentry and floor work:											
1751	Carpentry	53	113	1 853	7 771	6 528	4 019	2 511	*1 243	(S)	29	26
1752	Floor laying and other floor work	*26	55	*1 174	*4 941	*4 631	*2 259	*2 378	310	(D)	37	44
1761	Roofing, siding, and sheet metal work	*33	167	2 665	12 495	11 792	7 679	*4 196	703	(D)	29	35
1771	Concrete work	47	191	3 281	13 733	13 551	6 591	7 058	*183	*405	36	34
1781	Water well drilling	*5	*36	*921	*3 133	*3 133	*1 992	*1 141	—	*62	65	57
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	*14	*60	*1 121	*3 865	(D)	*2 412	*1 333	(D)	(S)	53	(D)
1793	Glass and glazing work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1794	Excavation work	42	*145	*2 644	*8 062	*7 605	*5 009	*3 508	*458	(D)	42	44
1795	Wrecking and demolition work	1	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1799	Special trade contractors, n.e.c.	(S)	116	*4 338	*13 453	*12 286	*7 427	*5 334	*1 167	45	35	49

CONSTRUCTION—GEOGRAPHIC AREA SERIES

MAINE ME—15

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16,17	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA—Con.											
	Worcester, MA-CT PMSA											
	Construction industries ----- (See appropriate State for SIC detail.)	1 112	8 958	290 127	959 896	752 864	472 223	289 233	207 032	8 326	3	3

Contents

Massachusetts

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Massachusetts. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 55,254 establishments in this State operating in the construction industries. These establishments accounted for \$13.0 billion in total dollar value of business done.

Most of the 55,254 construction establishments were small. Of the total, 41,807 were nonemployers, and over half of the employer establishments had less than 5 employees. The 4,127 construction establishments with 5 employees or more, while representing only 7 percent of all establishments, accounted for more than 74 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$11.5 billion in total dollar value of business done. Of this amount, \$11.4 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$3.1 billion, leaving net value of construction work of \$8.2 billion. In addition, these establishments paid out \$3.7 billion for the cost of

materials, fuels, power, rental of equipment and buildings, and the cost of selected purchased services. Value added for 1992 was \$5.1 billion. (See Introduction and appendixes for explanation of terms.)

There were 13,447 establishments with total employment averaging 86,755 during the year. Total payroll for 1992 was \$2.5 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 41,807 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$1.4 billion. Most of these establishments, about 85 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

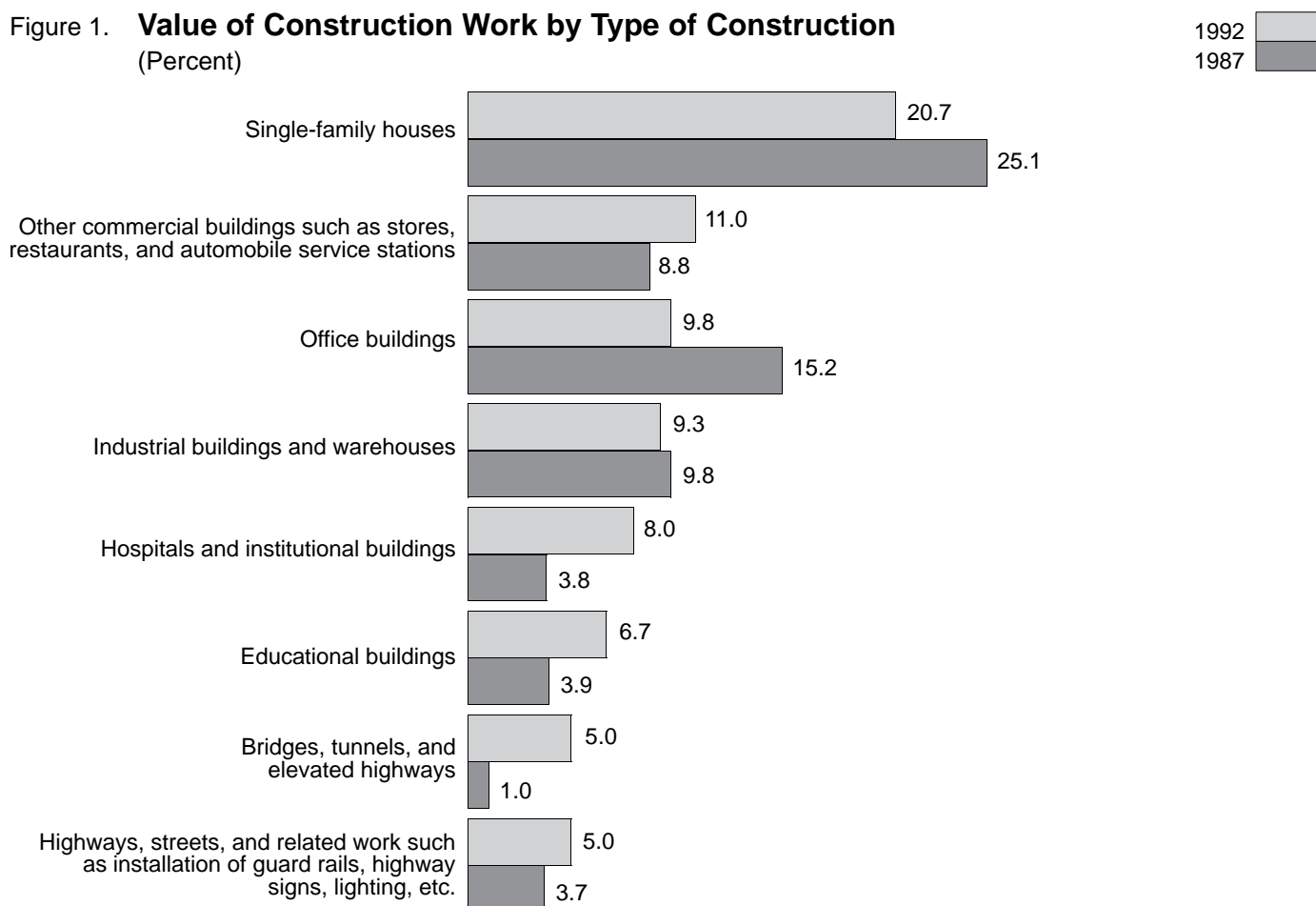


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

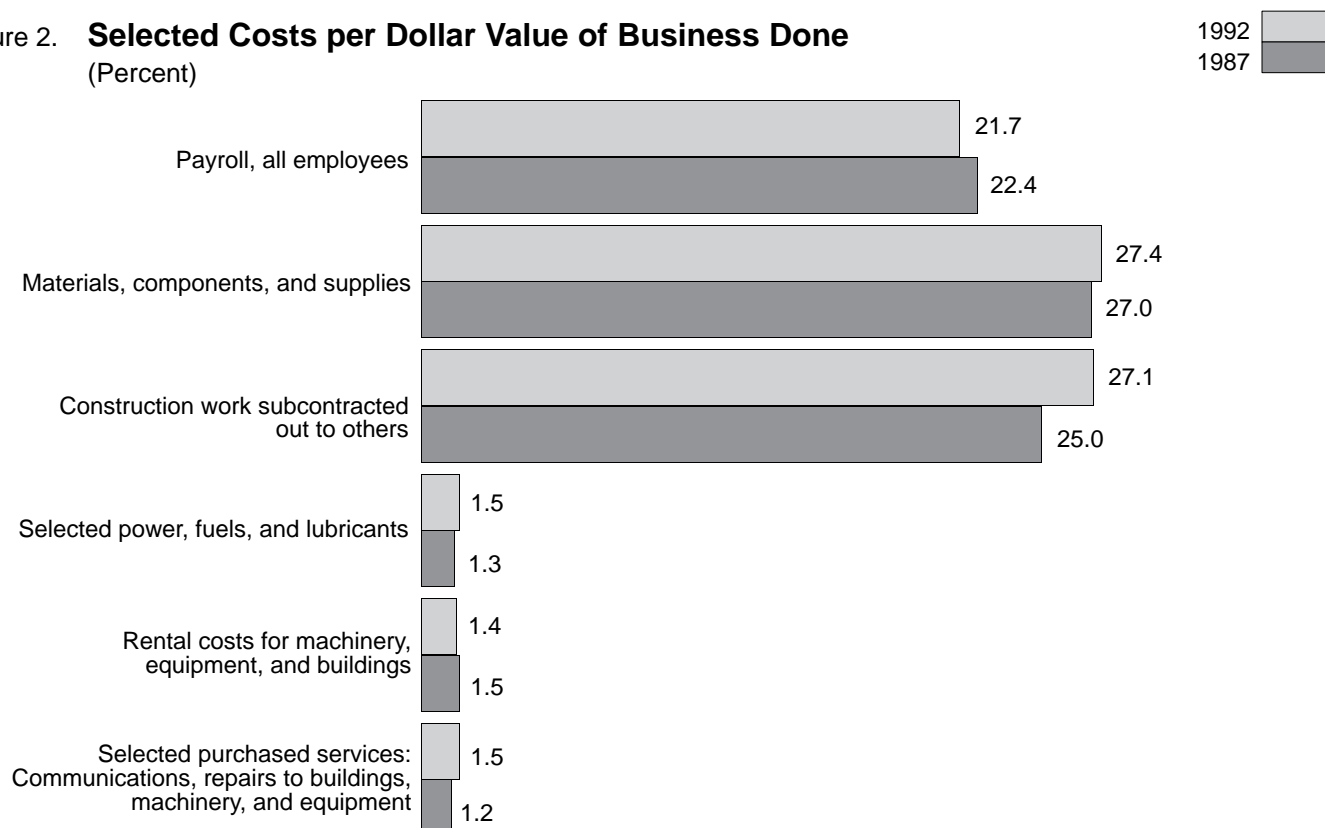


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	55 254	44 772	86 755	12 974 785	41 807	40 696	1 425 861	13 447	4 076	86 755	11 548 924	1	1
15	Building construction—General contractors and operative builders ----	9 405	5 952	17 967	4 687 969	5 838	5 127	472 932	3 567	825	17 967	4 215 037	2	3
16	Heavy construction other than building construction—contractors -----	1 282	564	12 993	2 257 837	481	423	21 100	801	141	12 993	2 236 737	1	1
17	Special trade contractors -----	44 568	38 255	55 795	6 028 979	35 488	35 146	931 829	9 080	3 109	55 795	5 097 150	1	1
1711	Plumbing, heating, and air-conditioning --	5 300	3 777	12 007	1 456 647	3 385	3 313	133 858	1 915	(S)	12 007	1 322 789	2	2
1731	Electrical work -----	5 338	4 148	11 639	1 184 765	3 724	3 664	88 859	1 614	484	11 639	1 095 906	2	1
	1987													
15, 16, 17	Construction industries² -----	61 171	45 908	143 625	19 210 213	43 312	42 436	3 563 092	17 859	3 472	143 625	15 647 121	1	1
15	Building construction—General contractors and operative builders ----	13 243	7 787	41 552	8 247 502	7 732	6 922	1 102 297	5 511	865	41 552	7 145 205	1	1
16	Heavy construction other than building construction—contractors -----	1 221	397	14 475	1 753 732	370	334	42 461	851	63	14 475	1 711 271	1	1
17	Special trade contractors -----	45 108	36 406	86 550	7 963 263	33 868	33 892	1 356 813	11 240	2 514	86 550	6 606 450	1	1
1711	Plumbing, heating, and air-conditioning --	4 864	3 081	17 765	1 749 496	2 691	2 670	164 891	2 173	411	17 765	1 584 605	2	2
1731	Electrical work -----	4 610	3 156	17 067	1 320 774	2 803	2 782	111 785	1 807	374	17 067	1 208 989	1	1

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	13 447	86 755	64 329	2 508 784	1 705 809	11 383 768	8 249 178	5 073 767
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	2 151	6 766	4 916	138 735	90 818	878 341	605 577	302 552
1522	Other residential buildings -----	168	782	550	21 315	13 311	111 335	71 027	42 173
1531	Operative builders -----	372	1 457	732	40 896	18 329	647 281	414 646	209 810
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	145	1 150	720	37 426	22 211	225 901	112 124	80 674
1542	Nonresidential buildings, n.e.c. -----	731	7 813	4 953	254 391	139 980	2 300 667	835 234	419 185
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	230	2 858	2 285	91 552	70 332	415 591	336 260	214 453
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	32	1 557	1 178	69 542	46 639	497 175	324 593	212 732
1623	Water, sewer, and utility lines -----	249	3 007	2 373	97 329	69 665	390 419	314 118	196 178
1629	Heavy construction, n.e.c. -----	290	5 571	3 291	227 464	119 608	897 848	700 045	505 242
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	1 915	12 007	8 747	374 420	264 823	1 305 949	1 108 895	663 691
1721	Painting and paper hanging -----	712	3 055	2 539	61 771	48 154	163 573	154 155	117 088
1731	Electrical work -----	1 614	11 639	8 918	362 397	257 001	1 082 981	1 034 318	645 328
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	539	2 673	2 253	60 836	47 781	193 731	181 082	124 486
1742	Plastering, drywall, and insulation work -----	424	2 952	2 391	79 571	62 070	245 092	222 640	149 080
1743	Terrazzo, tile, marble, and mosaic work -----	84	330	261	9 117	(S)	23 422	22 514	14 177
175	Carpentry and floor work:								
1751	Carpentry -----	1 114	3 418	2 722	74 238	55 473	312 528	260 813	145 715
1752	Floor laying and other floor work -----	237	833	614	17 847	11 332	105 590	88 427	43 047
1761	Roofing, siding, and sheet metal work -----	460	3 102	2 355	79 358	56 408	292 806	265 447	154 826
1771	Concrete work -----	555	3 173	2 711	73 405	59 325	263 499	243 691	150 240
1781	Water well drilling -----	49	260	187	7 994	5 557	25 825	25 529	15 961
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	79	1 693	1 473	56 479	46 428	143 975	131 386	99 631
1793	Glass and glazing work -----	107	536	342	12 683	7 184	42 370	41 327	25 107
1794	Excavation work -----	454	2 382	1 864	63 183	47 905	229 682	202 215	150 797
1795	Wrecking and demolition work -----	34	342	291	8 017	6 083	29 911	27 111	23 179
1796	Installing building equipment, n.e.c. -----	121	2 786	2 167	76 995	57 208	223 823	217 119	164 174
1799	Special trade contractors, n.e.c. -----	581	4 615	3 495	111 822	75 553	334 452	308 888	204 240

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
3 340 568	3 134 589	3 186 392	161 115	125 187	1 502 862	143 625	15 082 398	7 056 735	1	1	3	15, 16, 17
												15
319 197	272 764	36 300	(S)	8 027	79 717	15 444	1 508 197	636 125	4	5	14	152
31 599	40 308	*5 284	*1 801	*1 479	14 152	3 985	885 953	210 180	14	12	61	1521
215 869	232 635	2 257	(S)	2 234	39 209	5 535	1 275 204	369 665	8	15	25	1531
32 248	113 777	10 009	1 607	685	21 138	3 148	607 382	164 943	12	7	18	154
436 809	1 465 434	70 870	13 482	7 500	102 346	13 440	2 528 221	767 358	3	3	11	1542
												16
134 554	79 331	88 514	9 812	12 370	171 920	3 991	508 928	262 652	4	2	7	1611
122 876	172 582	13 506	7 223	6 897	55 210	514	60 456	29 143	3	1	5	162
122 946	76 301	98 093	13 426	14 789	142 490	3 378	358 332	224 219	5	4	11	1622
201 740	197 803	196 531	22 170	9 605	164 198	6 592	723 218	399 637	2	1	10	1623
												17
462 043	197 054	618 989	19 830	12 185	140 586	17 765	1 563 375	832 123	2	2	10	1711
37 418	9 417	88 482	2 729	2 502	18 737	5 210	264 982	198 646	4	5	18	1721
401 914	48 664	662 404	13 045	10 046	94 007	17 067	1 203 412	738 819	2	2	14	1731
57 245	12 649	115 030	3 105	2 232	33 100	4 968	298 477	201 844	9	4	19	174
76 593	22 453	177 851	3 315	2 244	19 299	6 470	482 165	287 807	9	10	23	1741
10 630	*908	12 441	223	(S)	(S)	577	44 310	26 321	16	12	(S)	1742
												1743
118 080	51 715	120 920	3 593	(S)	26 900	6 703	440 947	228 119	6	5	(S)	175
50 623	17 163	69 877	1 405	661	7 489	1 667	157 656	83 572	7	6	18	1751
115 724	27 359	138 167	4 671	(D)	47 092	6 262	444 392	252 178	5	5	(D)	1752
94 124	19 809	177 484	6 288	4 772	72 157	4 442	320 081	197 318	5	5	13	1761
9 568	296	5 934	448	*492	*18 598	378	29 631	18 291	13	12	43	1771
												1781
31 996	12 589	129 773	2 046	2 010	16 872	2 022	149 182	110 820	7	4	19	179
19 592	1 044	26 266	827	*214	4 457	1 453	123 305	61 537	8	7	51	1791
61 841	27 468	100 268	6 672	6 456	128 872	4 236	423 366	295 260	8	7	17	1793
5 003	2 799	16 282	(S)	(D)	6 516	327	32 808	27 366	13	4	(D)	1794
54 508	6 705	62 719	3 513	*1 727	12 354	1 618	150 103	105 236	2	2	44	1795
115 827	25 564	142 139	7 620	9 719	62 474	5 385	378 371	238 724	5	4	11	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	13 447	17 859	11 379	11 690	1	1	2	2
Proprietors and working partners.....	4 076	3 472	3 258	5 217	3	4	3	4
All employees**	86 755	143 625	96 314	87 444	1	1	1	1
Construction workers:								
March.....	56 463	98 507	66 433	52 790	1	1	1	1
May	64 057	113 708	79 663	70 531	1	1	1	1
August	69 900	123 974	84 080	75 320	1	1	1	1
November	66 895	112 549	80 712	67 124	1	1	1	1
Average	64 329	112 184	78 879	66 503	1	1	1	1
Other employees:								
March.....	22 484	30 379	17 257	19 938	1	1	1	1
May	22 182	31 205	(NA)	(NA)	1	1	(NA)	(NA)
August	22 372	31 996	(NA)	(NA)	1	1	(NA)	(NA)
November	22 666	32 202	(NA)	(NA)	1	1	(NA)	(NA)
Average	22 426	31 445	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	2 508 784	3 505 838	1 690 932	1 227 584	1	(Z)	1	1
Payroll, construction workers	1 705 809	2 466 933	1 285 983	853 333	1	(Z)	1	1
Payroll, other employees	802 975	1 038 904	404 949	374 251	1	1	1	1
First-quarter payroll, all employees	540 626	730 519	357 796	253 807	1	1	1	(Z)
Fringe benefits, all employees	726 043	798 234	319 461	228 164	1	1	1	1
Legally required expenditures	450 995	536 045	225 673	112 207	1	1	1	1
Voluntary expenditures	275 048	262 189	93 788	115 957	1	1	1	(Z)
Dollar value of business done	11 548 924	15 647 121	7 077 588	4 210 069	1	1	1	1
Value of construction work	11 383 768	15 082 398	6 900 454	4 073 613	1	1	1	1
Value of construction work subcontracted in from others	3 186 392	3 664 869	1 559 565	897 370	2	1	1	1
Other business receipts	165 157	306 141	148 691	136 456	4	3	2	3
Net value of construction†	8 249 178	11 169 770	4 949 906	3 034 340	1	1	1	1
Value added††	5 073 767	7 056 735	3 086 626	1 934 012	1	1	1	1
Selected costs	6 475 158	8 331 804	3 962 519	2 248 322	2	1	1	1
Materials, components, and supplies	3 161 750	4 217 577	1 896 810	1 142 468	2	1	1	1
Construction work subcontracted out to others	3 134 589	3 912 628	1 950 548	1 039 273	2	1	1	1
Selected power, fuels, and lubricants	178 819	201 599	115 160	66 581	2	1	2	1
Electricity.....	37 969	28 567	16 765	10 358	3	2	2	2
Natural gas	7 400	6 329	4 137	3 444	3	3	3	4
Gasoline and diesel fuel	122 469	153 246	85 954	43 423	2	1	2	1
On highway use	93 681	118 149	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use	28 788	35 097	(NA)	(NA)	3	2	(NA)	(NA)
Other, including lubricating oils and greases.....	10 980	13 454	8 303	9 360	4	3	4	3
Rental cost for machinery, equipment, and buildings	161 115	235 844	101 408	64 664	2	2	2	1
For machinery and equipment	92 545	165 791	77 140	51 214	3	3	2	2
For buildings.....	68 570	70 052	24 268	13 450	3	2	2	2
Selected purchased services	168 257	192 963	94 117	65 688	2	1	2	1
Communication services	59 287	63 789	31 298	24 156	2	2	2	1
Repairs to buildings and other structures	8 904	14 042	4 971	2 850	5	4	3	5
Repairs to machinery and equipment	100 066	115 131	57 848	38 683	3	2	2	1
Ownership of construction projects:								
Value of construction work	11 383 768	15 082 398	6 900 454	4 073 613	1	1	1	1
Government owned	3 463 196	2 233 825	1 314 453	1 017 298	3	2	2	1
Federal	442 752	407 096	(NA)	(NA)	3	3	(NA)	(NA)
State and local	3 020 443	1 826 728	(NA)	(NA)	3	2	(NA)	(NA)
Privately owned	7 920 572	12 848 573	5 586 000	3 056 315	2	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 440 168	1 517 186	2	4
Capital expenditures, other than land -----	125 187	260 507	3	3
New -----	95 302	220 422	4	3
Used -----	29 885	40 085	5	6
Retirements and disposition of depreciable assets -----	62 493	139 122	11	18
End-of-year gross book value of depreciable assets -----	1 502 862	1 638 571	2	3
Depreciation charges during year -----	160 590	221 060	3	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	203 848	459 168	6	12
Capital expenditures, other than land -----	9 618	33 361	11	7
New buildings and other structures -----	7 516	24 142	13	8
Used buildings and other structures -----	2 103	9 218	20	16
Retirements and disposition of depreciable assets -----	*9 765	88 361	57	29
End-of-year gross book value of depreciable assets -----	203 701	404 168	6	9
Depreciation charges during year -----	15 800	34 631	10	8
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 236 320	1 058 018	2	2
Capital expenditures, other than land -----	115 569	227 145	3	3
New machinery and equipment, including automobiles and trucks -----	87 787	196 279	4	3
New automobiles and trucks, intended primarily for highway use -----	35 029	103 320	5	3
Used machinery and equipment, including automobiles and trucks -----	27 782	30 866	5	6
Retirements and disposition of depreciable assets -----	52 728	50 761	7	9
End-of-year gross book value of depreciable assets -----	1 299 161	1 234 403	2	2
Depreciation charges during year -----	144 790	186 429	3	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	13 447	1
Value of construction work	11 383 768	1
Establishments with inventories:		
Number	3 651	2
Value of construction work	3 888 996	1
Inventories ¹ :		
End of 1992, materials and supplies	122 273	7
End of 1991, materials and supplies	117 728	11
Establishments with no inventories:		
Number	4 706	2
Value of construction work	4 421 614	1
Establishments not reporting:		
Number	5 091	2
Value of construction work	3 073 158	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	13 447	9 321	2 238	1 139	560	122	54	8	5	1	
All employees** -----	86 755	17 244	14 346	14 984	16 411	8 224	7 543	2 617	5 386	(D)	
Payroll, all employees -----	2 508 784	331 958	352 706	431 964	528 686	315 810	247 873	87 640	212 148	(D)	
Dollar value of business done -----	11 548 924	1 939 372	1 423 413	1 802 335	2 227 061	1 705 048	1 312 148	434 677	704 871	(D)	
Value of construction work -----	11 383 768	1 913 200	1 399 881	1 774 237	2 197 708	1 680 032	1 279 576	434 264	704 871	(D)	
Net value of construction work† -----	8 249 178	1 530 892	1 110 928	1 329 874	1 597 372	1 066 138	732 499	277 873	603 603	(D)	
Value added†† -----	5 073 767	841 100	664 145	821 612	995 451	690 144	408 237	185 164	467 914	(D)	
Cost of materials, components, supplies, and fuels -----	3 340 568	715 965	470 315	536 360	631 273	401 010	356 834	93 122	135 689	(D)	
Cost of construction work subcontracted out to others -----	3 134 589	382 307	288 952	444 363	600 337	613 894	547 077	156 391	101 268	(D)	
Rental cost for machinery, equipment, and buildings -----	161 115	23 852	25 802	27 091	34 441	22 704	15 541	3 724	7 960	(D)	
Capital expenditures, other than land -----	125 187	26 665	17 963	23 569	22 611	15 419	17 898	(D)	1 062	(D)	
End-of-year gross book value of depreciable assets -----	1 502 862	285 996	251 021	306 189	305 512	157 451	125 886	70 808	(D)	(D)	
1987											
All employees** -----	143 625	(S)	26 200	25 767	29 860	16 171	14 599	4 735	5 000	(D)	
Value of construction work -----	15 082 398	(S)	2 222 872	2 352 997	3 227 491	2 127 814	1 829 885	1 217 153	(D)	(D)	
Value added†† -----	7 056 735	(S)	1 112 992	1 196 394	1 530 222	907 264	849 606	240 459	269 438	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	3	4	3	3	(Z)	3	(Z)	(Z)	(D)	
Net value of construction work† -----	1	3	4	5	2	(Z)	(Z)	(Z)	(Z)	(D)	
Capital expenditures, other than land -----	3	9	11	9	2	(Z)	(Z)	(D)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	13 447	(S)	(S)	(S)	4 064	2 286	1 655	1 145	400	184	142
All employees** -----	86 755	(S)	(S)	(S)	9 577	9 930	12 391	14 628	9 819	7 876	18 321
Payroll, all employees -----	2 508 784	(S)	(S)	(S)	165 885	223 167	291 721	428 909	330 356	292 031	726 284
Dollar value of business done -----	11 548 924	(S)	(S)	(S)	656 150	808 190	1 153 514	1 732 939	1 362 980	1 237 877	4 410 572
Value of construction work -----	11 383 768	(S)	(S)	(S)	649 459	794 921	1 134 781	1 699 743	1 342 703	1 217 536	4 359 272
Net value of construction work† -----	8 249 178	(S)	(S)	(S)	585 093	703 539	941 908	1 356 452	1 045 794	896 705	2 548 686
Value added†† -----	5 073 767	(S)	(S)	(S)	349 100	418 659	571 948	823 403	625 301	567 319	1 613 830
Cost of materials, components, supplies, and fuels -----	3 340 568	(S)	(S)	(S)	242 684	298 149	388 694	566 245	440 770	349 727	986 156
Cost of construction work subcontracted out to others -----	3 134 589	(S)	(S)	(S)	64 367	91 382	192 873	343 291	296 909	320 831	1 810 586
Rental cost for machinery, equipment, and buildings -----	161 115	(S)	(S)	(S)	10 778	13 993	19 097	29 752	18 638	23 241	43 101
Capital expenditures, other than land -----	125 187	(S)	(S)	(S)	11 615	15 522	14 351	23 660	11 098	19 950	25 867
End-of-year gross book value of depreciable assets -----	1 502 862	(S)	(S)	(S)	131 534	159 449	192 709	307 000	197 508	168 856	312 344
1987											
All employees** -----	143 625	(S)	(S)	(S)	(S)	(S)	21 011	25 463	17 399	14 595	26 259
Value of construction work -----	15 082 398	(S)	(S)	(S)	(S)	(S)	1 625 030	2 577 940	2 197 059	1 768 735	4 773 802
Value added†† -----	7 056 735	(S)	(S)	(S)	(S)	(S)	850 875	1 313 283	1 055 592	854 160	1 772 545
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	(S)	4	5	4	3	3	1	(Z)
Net value of construction work† -----	1	(S)	(S)	(S)	4	4	4	3	4	1	2
Capital expenditures, other than land -----	3	(S)	(S)	(S)	13	13	12	8	3	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	11 383 768	5 545 295	3 708 182	1 821 104	1	3	1	2
Building construction	8 228 121	4 156 946	2 861 448	1 209 727	2	3	1	2
Single-family houses	2 361 364	1 460 174	588 313	312 877	6	9	4	4
Single-family houses, detached	2 121 194	1 324 947	527 545	268 702	6	10	4	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	240 170	(S)	60 768	44 176	7	(S)	7	7
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	313 610	96 759	129 959	86 892	4	6	6	6
Other residential buildings, including hotels, motels, and tourist cabins	114 112	54 905	42 949	16 258	4	6	8	7
Office buildings	1 112 728	438 181	506 401	168 146	2	3	3	4
Other commercial buildings such as stores, restaurants, and automobile service stations	1 246 838	642 156	393 390	211 292	3	2	5	7
Industrial buildings and warehouses	1 061 799	469 655	357 304	234 840	2	2	3	3
Industrial buildings	889 398	367 198	318 566	203 635	2	2	3	4
Warehouses	172 400	102 457	38 738	31 205	3	4	5	9
Religious buildings	91 303	(S)	47 115	17 220	5	(S)	7	8
Educational buildings	759 451	419 442	272 890	67 119	3	1	8	4
Hospitals and institutional buildings	909 383	409 413	422 869	77 101	2	1	3	4
Amusement, social, and recreational buildings, indoors	114 087	56 732	(S)	6 450	4	3	(S)	19
Other nonresidential buildings	143 447	82 560	49 354	11 532	4	5	7	15
Nonbuilding construction	2 846 460	1 388 350	846 734	611 377	1	1	1	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	565 499	171 402	281 999	112 098	2	3	2	4
Private driveways and parking areas	80 869	31 816	26 410	22 644	9	14	7	19
Bridges, tunnels, and elevated highways	571 934	395 841	147 244	28 849	2	2	2	11
Tunnels	265 435	255 970	9 014	451	4	4	(Z)	17
Bridges and elevated highways	306 499	139 871	138 229	28 398	1	(Z)	2	11
Power and communication transmission lines, towers, and related facilities	135 234	55 397	27 093	52 745	4	5	10	5
Sewers, water mains, and related facilities	420 102	295 762	73 369	50 972	4	4	10	8
Sewers, sewer lines, septic systems, and related facilities	264 549	191 973	44 763	27 813	4	4	10	12
Water mains and related facilities	155 554	103 788	28 606	23 159	6	7	14	8
Pipeline construction other than sewer or water lines	57 817	34 597	8 573	14 647	6	9	3	3
Mass transit construction	165 078	37 732	125 474	1 872	1	2	1	(Z)
Power plants	330 689	42 975	17 688	270 026	2	8	7	1
Sewage treatment and water treatment plants	295 313	192 626	92 128	10 559	2	2	1	31
Other nonbuilding construction	223 924	130 202	46 757	46 965	4	5	6	8
Construction work, n.s.k.	309 186	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
1987								
Value of construction work	15 082 398	9 251 021	3 509 549	1 580 702	1	1	1	1
Building construction	11 999 502	7 757 748	2 966 236	1 224 586	1	1	1	2
Single-family houses	3 789 369	2 711 130	760 970	317 288	2	3	4	4
Single-family houses, detached	3 033 099	2 080 143	686 792	266 164	2	3	4	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	756 269	630 987	74 177	51 104	6	6	15	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	1 068 727	668 113	309 443	91 170	2	2	5	5
Other residential buildings, including hotels, motels, and tourist cabins	635 016	476 928	108 470	49 618	5	6	8	8
Office buildings	2 293 369	1 558 520	555 868	178 981	1	1	2	4
Other commercial buildings such as stores, restaurants, and automobile service stations	1 324 860	724 467	408 469	191 924	2	2	3	3
Industrial buildings and warehouses	1 473 380	920 906	329 548	222 925	2	2	2	4
Industrial buildings	1 185 913	714 526	270 168	201 218	2	2	2	4
Warehouses	287 467	206 380	59 380	21 706	5	7	3	7
Religious buildings	103 696	37 683	43 626	22 387	5	4	7	15
Educational buildings	582 664	322 274	180 545	79 844	2	1	4	3
Hospitals and institutional buildings	572 163	302 034	219 316	50 813	1	1	2	5
Amusement, social, and recreational buildings, indoors	53 178	30 288	18 353	4 537	14	23	14	9
Other nonresidential buildings	103 080	37 857	36 075	29 152	11	8	14	26
Nonbuilding construction	2 341 771	1 460 821	538 866	342 083	1	1	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	552 653	293 833	176 761	82 058	2	3	4	5
Private driveways and parking areas	127 660	91 574	17 924	18 161	6	6	13	12
Bridges, tunnels, and elevated highways	143 585	67 032	47 628	28 923	7	9	5	19
Tunnels	19 208	12 922	*5 192	1 094	33	36	47	28
Bridges and elevated highways	124 376	54 110	42 436	27 829	6	7	1	20
Power and communication transmission lines, towers, and related facilities	82 889	52 284	14 861	15 743	6	5	4	20
Sewers, water mains, and related facilities	437 648	352 626	47 091	37 930	4	4	6	8
Sewers, sewer lines, septic systems, and related facilities	263 751	219 955	28 573	15 221	4	4	6	10
Water mains and related facilities	173 897	132 670	18 517	22 709	6	7	11	10
Mass transit construction	145 486	54 123	85 740	5 622	(Z)	(Z)	(Z)	(Z)
Power plants	146 602	83 283	13 758	49 560	1	1	2	1
Sewage treatment and water treatment plants	209 509	162 678	32 623	14 208	3	1	10	24
Other nonbuilding construction	495 739	303 388	102 479	89 878	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	741 125	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	13 447	64 329	56 463	64 057	69 900	66 895	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	2 151	4 916	4 642	5 044	5 333	4 642	3	4	5	4	4	5
1522	Other residential buildings -----	168	550	457	551	606	587	16	15	18	16	15	14
1531	Operative builders -----	372	732	661	746	801	719	9	10	10	10	10	11
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	145	720	585	730	755	811	14	13	14	13	12	14
1542	Nonresidential buildings, n.e.c. ---	731	4 953	4 713	4 855	5 483	4 762	6	4	3	4	5	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	230	2 285	1 181	2 396	2 871	2 692	9	4	5	4	4	4
162	Heavy construction, except highway: Bridge, tunnel, and elevated												
1622	highway construction -----	32	1 178	1 049	1 302	1 202	1 159	10	3	3	3	3	3
1623	Water, sewer, and utility lines -----	249	2 373	1 640	2 472	2 707	2 675	9	5	6	5	4	6
1629	Heavy construction, n.e.c. -----	290	3 291	2 682	3 311	3 630	3 540	9	2	2	2	2	2
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 915	8 747	8 391	8 724	8 836	9 036	2	2	2	3	2	2
1721	Painting and paper hanging -----	712	2 539	1 721	2 717	3 319	2 398	4	4	5	4	5	5
1731	Electrical work -----	1 614	8 918	8 623	8 397	9 394	9 258	1	2	2	2	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	539	2 253	1 658	2 316	2 505	2 531	5	10	11	11	10	9
1742	Plastering, drywall, and insulation work -----	424	2 391	2 090	2 098	2 576	2 801	6	11	5	5	18	17
1743	Terrazzo, tile, marble, and mosaic work -----	84	261	258	271	273	241	19	16	15	15	15	15
175	Carpentry and floor work:												
1751	Carpentry -----	1 114	2 722	2 422	2 730	3 065	2 670	4	6	6	6	6	6
1752	Floor laying and other floor work --	237	614	653	635	626	544	8	8	8	8	9	9
1761	Roofing, siding, and sheet metal work -----	460	2 355	1 935	2 292	2 725	2 468	6	5	6	5	5	5
1771	Concrete work -----	555	2 711	1 691	2 850	3 230	3 074	6	5	7	5	6	5
1781	Water well drilling -----	49	187	179	179	203	187	16	14	13	15	15	15
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	79	1 473	1 806	1 268	1 017	1 799	16	7	5	10	12	6
1793	Glass and glazing work -----	107	342	364	326	351	327	14	8	8	9	8	9
1794	Excavation work -----	454	1 864	1 371	1 906	2 112	2 068	8	8	9	8	8	8
1795	Wrecking and demolition work -----	34	291	269	339	287	271	12	14	15	19	11	8
1796	Installing building equipment, n.e.c. -----	121	2 167	2 582	1 918	2 074	2 095	10	2	1	2	2	2
1799	Special trade contractors, n.e.c. ---	581	3 495	2 839	3 681	3 919	3 540	7	5	5	5	5	4

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	6.5	28.9	177.0	.220	.293	.275	.280	.014
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.1	20.5	178.7	.158	.363	.311	.041	(S)
1522	Other residential buildings -----	4.6	27.3	202.4	.191	.284	.362	*.047	.016
1531	Operative builders -----	3.9	28.1	884.3	.063	.334	.359	.003	(S)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	7.9	32.5	313.8	.166	.143	.504	.044	.007
1542	Nonresidential buildings, n.e.c. -----	10.7	32.6	464.5	.111	.190	.637	.031	.006
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	12.4	32.0	181.9	.220	.324	.191	.213	.024
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	48.8	44.7	422.1	.140	.247	.347	.027	.015
1623	Water, sewer, and utility lines -----	12.1	32.4	164.5	.249	.315	.195	.251	.034
1629	Heavy construction, n.e.c. -----	19.2	40.8	272.8	.253	.225	.220	.219	.025
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	6.3	31.2	149.3	.287	.354	.151	.474	.015
1721	Painting and paper hanging -----	4.3	20.2	64.4	.378	.229	.058	.541	.017
1731	Electrical work -----	7.2	31.1	121.4	.335	.371	.045	.612	.012
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.0	22.8	86.0	.314	.295	.065	.594	.016
1742	Plastering, drywall, and insulation work -----	7.0	27.0	102.5	.325	.313	.092	.726	.014
1743	Terrazzo, tile, marble, and mosaic work -----	3.9	27.6	89.7	.389	.454	.039	.531	.010
175	Carpentry and floor work:								
1751	Carpentry -----	3.1	21.7	114.8	.238	.378	.165	.387	.011
1752	Floor laying and other floor work -----	3.5	21.4	172.0	.169	.479	.163	.662	.013
1761	Roofing, siding, and sheet metal work -----	6.7	25.6	124.3	.271	.395	.093	.472	.016
1771	Concrete work -----	5.7	23.1	97.2	.279	.357	.075	.674	.024
1781	Water well drilling -----	5.3	30.7	138.1	.310	.370	.011	.230	.017
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	21.5	33.4	97.7	.392	.222	.087	.901	.014
1793	Glass and glazing work -----	5.0	23.7	123.9	.299	.462	.025	.620	.020
1794	Excavation work -----	5.3	26.5	123.2	.275	.269	.120	.437	.029
1795	Wrecking and demolition work -----	10.2	23.4	102.8	.268	.167	.094	.544	(S)
1796	Installing building equipment, n.e.c. -----	23.0	27.6	103.3	.344	.244	.030	.280	.016
1799	Special trade contractors, n.e.c. -----	7.9	24.2	95.7	.334	.346	.076	.425	.023

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work subcontracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA											
15,16,17	Construction industries	12 243	81 838	2 373 923	10 850 651	7 795 632	4 779 944	3 171 595	3 055 019	114 237	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	5 708	110 750	706 759	493 053	242 509	263 814	213 705	6 606	5	5
1522	Other residential buildings	175	813	22 429	112 671	72 527	46 531	29 106	40 144	807	13	12
1531	Operative builders	385	1 578	44 821	682 250	442 959	218 538	236 385	239 291	2 619	7	14
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	156	1 029	32 600	206 537	101 940	73 206	30 157	104 597	(S)	10	6
1542	Nonresidential buildings, n.e.c.	661	7 636	251 621	2 297 588	792 724	406 931	422 836	1 504 864	8 797	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	186	2 376	76 098	351 410	283 480	167 496	119 003	67 930	9 828	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	29	1 356	61 789	459 022	308 945	202 177	108 555	150 077	6 415	3	1
1623	Water, sewer, and utility lines	240	2 825	88 879	361 351	287 073	179 918	113 000	74 277	13 030	5	4
1629	Heavy construction, n.e.c.	265	5 716	231 386	916 111	708 579	507 539	208 904	207 533	11 223	1	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 823	11 509	353 357	1 207 486	1 033 712	613 810	435 086	173 774	10 922	2	2
1721	Painting and paper hanging	614	2 761	55 356	148 651	138 536	104 643	34 419	10 115	2 239	5	6
1731	Electrical work	1 468	10 685	339 496	1 016 518	969 186	600 178	382 086	47 332	8 411	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	2 317	51 729	165 144	154 433	107 492	47 573	10 711	1 838	10	5
1742	Plastering, drywall, and insulation work	429	3 271	89 477	287 958	256 401	164 927	94 202	31 557	2 020	9	9
1743	Terrazzo, tile, marble, and mosaic work	74	282	(S)	20 828	20 031	(S)	8 978	*797	(S)	17	12
175	Carpentry and floor work:											
1751	Carpentry	924	3 085	67 890	287 397	237 944	132 041	108 826	49 453	(S)	6	6
1752	Floor laying and other floor work	244	969	21 663	122 958	(D)	51 223	58 862	(D)	829	8	(D)
1761	Roofing, siding, and sheet metal work	431	2 833	71 126	252 638	232 396	138 680	96 777	20 242	(S)	5	5
1771	Concrete work	506	2 796	63 312	229 191	212 292	132 871	80 223	16 899	4 478	6	5
1781	Water well drilling	59	344	10 038	32 704	32 475	20 418	12 117	228	671	13	12
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	97	1 818	58 940	150 435	(D)	103 748	34 133	(D)	2 110	7	(D)
1793	Glass and glazing work	98	527	12 828	41 966	41 197	26 199	18 892	(S)	*174	10	12
1794	Excavation work	417	2 138	55 937	206 929	181 644	135 178	55 880	25 285	5 767	9	8
1795	Wrecking and demolition work	(S)	342	8 672	33 380	29 628	25 313	4 978	3 752	537	2	2
1796	Installing building equipment, n.e.c.	104	2 698	74 030	219 189	212 956	159 611	54 929	6 233	1 411	1	1
1799	Special trade contractors, n.e.c.	502	4 428	111 827	333 580	308 834	206 493	111 877	24 745	8 170	5	5
	Boston, MA-NH PMSA											
15,16,17	Construction industries	6 890	49 004	1 486 300	7 345 622	5 037 835	3 091 565	2 036 809	2 307 788	63 841	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	3 300	68 901	446 379	300 398	146 791	162 628	145 980	3 439	7	7
1522	Other residential buildings	108	576	17 037	91 317	56 843	34 837	24 428	34 474	(D)	15	12
1531	Operative builders	221	861	24 309	415 801	250 657	125 846	130 415	*165 143	1 510	11	24
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	57	482	(D)	151 294	66 669	49 476	17 696	84 625	(S)	14	7
1542	Nonresidential buildings, n.e.c.	427	5 608	188 819	1 816 995	622 029	302 192	337 134	1 194 965	5 478	4	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	113	1 150	38 991	163 678	131 639	85 092	47 667	32 039	4 683	6	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	20	1 272	58 855	446 559	(D)	194 891	105 912	(D)	6 201	3	(D)
1623	Water, sewer, and utility lines	135	1 610	55 071	229 030	175 225	104 244	74 843	53 805	5 833	6	5
1629	Heavy construction, n.e.c.	139	2 531	96 601	602 815	439 445	337 881	106 030	163 370	6 046	3	2

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA—Con.											
	Boston, MA-NH PMSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 097	7 427	246 148	829 498	706 013	421 599	295 600	123 486	6 448	3	2
1721	Painting and paper hanging	348	1 991	42 231	110 551	103 511	79 234	24 457	7 040	1 576	6	7
1731	Electrical work	858	6 808	228 362	699 973	664 540	413 695	262 297	35 433	6 639	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	1 735	39 407	124 325	117 102	82 266	35 431	7 223	1 325	14	6
1742	Plastering, drywall, and insulation work	200	1 494	42 452	120 064	114 562	81 324	33 691	5 502	(S)	18	18
1743	Terrazzo, tile, marble, and mosaic work	47	(S)	(S)	16 654	15 935	(D)	6 758	*719	(D)	(S)	12
175	Carpentry and floor work:											
1751	Carpentry	505	1 907	42 807	173 543	145 637	77 855	69 287	27 906	(S)	9	7
1752	Floor laying and other floor work	(S)	588	13 525	80 814	(D)	32 349	38 454	(D)	329	9	(D)
1761	Roofing, siding, and sheet metal work	235	1 420	40 173	144 553	130 610	78 548	52 888	13 944	(S)	8	8
1771	Concrete work	242	1 528	37 792	(D)	(D)	73 824	39 999	(D)	1 391	9	(D)
1781	Water well drilling	22	62	1 539	(D)	(D)	3 939	2 470	(S)	(S)	14	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	34	520	(D)	(D)	(D)	(D)	23 075	(D)	1 549	21	(D)
1793	Glass and glazing work	50	313	7 179	23 131	22 535	(D)	9 010	(S)	(D)	11	11
1794	Excavation work	215	1 219	32 813	120 403	104 691	77 081	34 606	15 712	3 542	14	12
1795	Wrecking and demolition work	18	145	3 977	(D)	(D)	(D)	908	(D)	(D)	4	(D)
1796	Installing building equipment, n.e.c.	76	2 197	62 831	186 000	(D)	136 850	47 176	(D)	505	1	(D)
1799	Special trade contractors, n.e.c.	285	2 057	(D)	152 174	(D)	89 054	53 950	(D)	2 525	8	(D)
	Brockton, MA PMSA											
15,16,17	Construction industries	545	3 110	82 089	306 915	253 477	165 924	94 379	53 437	3 003	4	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	73	211	4 255	(S)	18 834	10 247	8 882	(S)	*306	21	15
1522	Other residential buildings	(S)	(S)	(S)	*1 987	(D)	*941	(S)	(D)	—	(S)	(D)
1531	Operative builders	12	(D)	(D)	9 555	7 055	2 142	4 953	2 500	129	(D)	18
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(S)	(S)	8 555	(S)	(S)	(S)	3 390	(S)	(S)	(S)
1542	Nonresidential buildings, n.e.c.	23	196	4 710	34 593	12 572	7 424	5 389	22 021	228	4	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	292	6 954	37 476	33 566	23 170	10 702	3 910	(D)	11	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	(S)	*91	*2 513	*11 266	*10 337	*4 192	*6 145	*928	(S)	44	53
1629	Heavy construction, n.e.c.	(S)	80	2 468	9 259	7 449	5 047	2 411	1 810	—	27	13
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	(S)	285	6 618	22 863	20 935	12 771	8 439	1 928	235	19	15
1721	Painting and paper hanging	20	*27	352	1 590	(D)	987	496	(D)	(D)	57	(D)
1731	Electrical work	53	535	17 901	41 208	39 686	30 835	8 851	1 522	172	12	8
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	26	121	2 968	9 334	7 361	5 013	2 348	1 973	*80	39	24
1742	Plastering, drywall, and insulation work	26	165	5 124	16 181	14 718	9 838	7 030	*1 463	*409	10	15
1743	Terrazzo, tile, marble, and mosaic work	4	(D)	(D)	(D)	(D)	(S)	*79	(D)	—	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	48	77	1 434	6 549	5 649	3 527	2 270	(S)	*85	25	23
1752	Floor laying and other floor work	*14	(D)	(D)	(D)	(D)	*1 835	(D)	(D)	(D)	(D)	(D)
1761	Roofing, siding, and sheet metal work	20	156	4 193	14 421	13 197	7 315	6 119	1 224	90	7	9

CONSTRUCTION—GEOGRAPHIC AREA SERIES

MASSACHUSETTS MA—15

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON–WORCESTER–LAWRENCE, MA–NH–ME–CT CMSA—Con.											
	Brockton, MA PMSA—Con.											
15,16, 17	Construction industries—Con.											
17	Special trade contractors—Con.											
1771	Concrete work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1781	Water well drilling	*3	(D)	(S)	(S)	(S)	(D)	(S)	(S)	—	(D)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	87	3 087	(D)	(D)	4 187	(S)	(D)	(D)	(Z)	(D)
1793	Glass and glazing work	5	(D)	(D)	(D)	(D)	856	918	(D)	(D)	(D)	(D)
1794	Excavation work	14	70	1 711	6 220	6 154	5 450	(D)	66	262	9	9
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c.	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1799	Special trade contractors, n.e.c.	45	359	9 270	26 498	25 702	18 902	9 577	796	(D)	16	12
	Fitchburg–Leominster, MA PMSA											
15,16, 17	Construction industries	269	1 302	32 635	128 736	104 319	61 979	46 007	24 417	1 269	10	9
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	(S)	(S)
1522	Other residential buildings	(S)	*62	*1 145	*1 979	*1 963	*1 018	*945	(S)	—	66	61
1531	Operative builders	*3	(S)	(S)	(D)	(D)	(S)	(D)	(S)	—	(S)	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(D)	(S)	(D)	(D)	(D)	(D)	(S)	—	(D)	(D)
1542	Nonresidential buildings, n.e.c.	*16	76	3 016	19 630	9 136	4 303	5 808	10 494	133	26	32
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	(S)	(S)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	(S)	(S)
1623	Water, sewer, and utility lines	*6	*50	1 224	(D)	(D)	3 421	1 895	(D)	310	53	(D)
1629	Heavy construction, n.e.c.	(S)	(D)	*749	*2 378	*2 312	*1 280	(D)	(S)	—	(D)	57
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	34	210	4 860	12 166	11 740	8 106	4 701	*427	(S)	32	28
1721	Painting and paper hanging	*11	*12	*199	(D)	(D)	(S)	*119	(D)	—	62	(D)
1731	Electrical work	*32	110	3 026	(D)	(D)	5 247	*5 475	(D)	95	36	(D)
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	*21	*46	*1 006	*3 780	*3 144	*1 909	*1 235	(S)	—	57	68
1742	Plastering, drywall, and insulation work	(S)	136	2 800	12 394	(D)	5 000	3 953	(D)	*154	34	(D)
1743	Terrazzo, tile, marble, and mosaic work	(S)	(S)	(D)	(S)	(S)	(S)	(D)	—	—	(S)	(S)
175	Carpentry and floor work:											
1751	Carpentry	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floor work	—	—	—	—	—	—	—	—	—	—	—
1761	Roofing, siding, and sheet metal work	*13	89	1 691	10 441	9 625	3 810	5 819	*816	—	25	22
1771	Concrete work	*23	*57	*1 304	(D)	(D)	*3 900	*2 697	(D)	*226	43	(D)
1781	Water well drilling	1	16	677	1 431	1 406	1 119	287	25	—	—	—
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	*3	*45	*1 240	*4 080	*3 868	*3 011	*1 073	212	(D)	49	47
1793	Glass and glazing work	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1794	Excavation work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1795	Wrecking and demolition work	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c.	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1799	Special trade contractors, n.e.c.	*6	(D)	(D)	(D)	*4 264	*3 311	(D)	(D)	(D)	(D)	52

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA—Con.											
	Lawrence, MA-NH PMSA											
15,16,17	Construction industries	817	5 082	124 320	496 532	402 893	259 128	152 254	93 639	14 205	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	(S)	6 079	48 303	34 584	17 814	17 537	13 719	1 116	(S)	13
1522	Other residential buildings	*7	*19	442	(D)	(D)	(D)	448	(D)	(D)	47	(D)
1531	Operative builders	23	110	3 757	39 156	30 742	19 658	11 819	8 414	190	7	7
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	20	101	1 867	10 948	5 743	4 372	1 448	5 205	(D)	30	16
1542	Nonresidential buildings, n.e.c.	(S)	311	8 405	50 208	24 485	13 487	11 543	25 724	392	10	11
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	10	80	2 771	12 624	11 404	5 346	(D)	1 220	214	8	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	20	309	8 912	34 174	29 710	19 713	10 212	4 464	3 807	8	10
1629	Heavy construction, n.e.c.	19	323	9 008	31 617	22 158	11 784	11 486	9 459	1 015	2	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	105	532	14 311	44 270	40 775	26 349	14 683	3 494	746	7	7
1721	Painting and paper hanging	36	69	1 109	5 292	(D)	2 829	1 359	(D)	161	5	(D)
1731	Electrical work	86	347	8 525	27 756	26 542	15 926	11 099	*1 214	182	14	14
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	120	2 148	6 578	6 227	4 493	1 734	351	(S)	17	7
1742	Plastering, drywall, and insulation work	24	197	4 965	15 163	14 254	10 026	4 233	909	68	12	15
1743	Terrazzo, tile, marble, and mosaic work	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	48	183	3 668	15 010	(D)	6 059	4 943	(D)	149	17	(D)
1752	Floor laying and other floor work	10	70	1 572	6 865	(D)	2 766	3 707	(D)	76	15	(D)
1761	Roofing, siding, and sheet metal work	25	175	2 915	11 383	10 758	5 877	4 881	625	269	7	6
1771	Concrete work	26	(D)	4 333	13 495	11 729	6 478	5 325	1 766	343	(D)	6
1781	Water well drilling	7	37	1 058	3 335	3 323	2 170	1 212	*12	(D)	28	29
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	*9	(D)	(S)	(D)	(D)	(S)	(S)	(D)	(D)	(D)	(D)
1793	Glass and glazing work	*13	*46	*1 354	(D)	(D)	(S)	*2 455	(D)	(D)	66	(D)
1794	Excavation work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work	(S)	(S)	(S)	(S)	(D)	(S)	(D)	(D)	(D)	(S)	(D)
1796	Installing building equipment, n.e.c.	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	47	1 017	25 164	69 803	63 989	51 652	14 901	5 814	4 639	5	5
	Lowell, MA-NH PMSA											
15,16,17	Construction industries	711	4 158	107 067	528 670	419 261	238 826	188 724	109 408	9 495	3	4
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	96	309	5 515	36 626	26 767	10 710	(S)	(S)	(S)	16	21
1522	Other residential buildings	*5	(S)	*759	(S)	(S)	(S)	(S)	(S)	—	(S)	(S)
1531	Operative builders	33	207	6 136	93 229	66 412	34 617	35 840	26 817	*482	20	16
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(S)	(S)	(D)
1542	Nonresidential buildings, n.e.c.	35	212	4 483	31 329	15 843	8 568	7 340	15 486	*2	29	18

CONSTRUCTION—GEOGRAPHIC AREA SERIES

MASSACHUSETTS MA—17

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA—Con.											
	Lowell, MA-NH PMSA—Con.											
15,16,17	Construction industries—Con.											
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	8	(S)	11 231	(D)	(D)	25 147	(D)	(D)	(S)	(S)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	12	110	3 204	9 669	9 082	6 905	2 207	587	(D)	17	15
1629	Heavy construction, n.e.c. -----	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning -----	114	477	12 485	58 368	47 336	28 430	18 941	*11 032	469	15	14
1721	Painting and paper hanging-----	46	151	(S)	(S)	(S)	(D)	1 671	(S)	229	20	(S)
1731	Electrical work -----	101	827	22 284	65 275	64 568	36 458	28 112	707	318	10	8
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	18	69	(S)	3 791	3 661	2 446	1 215	*129	(D)	21	21
1742	Plastering, drywall, and insulation work -----	28	183	6 169	21 152	(D)	10 722	7 217	(D)	*100	16	(D)
1743	Terrazzo, tile, marble, and mosaic work -----	—	—	—	—	—	—	—	—	—	—	—
175	Carpentry and floor work:											
1751	Carpentry -----	55	94	1 422	5 997	4 764	2 830	2 024	*1 232	(D)	24	21
1752	Floor laying and other floor work ---	9	41	975	4 677	4 429	1 345	3 084	248	71	20	10
1761	Roofing, siding, and sheet metal work -----	(S)	259	8 177	20 196	19 198	13 995	(S)	998	173	17	14
1771	Concrete work -----	29	260	5 086	35 071	(D)	17 543	13 125	(D)	1 769	13	(D)
1781	Water well drilling -----	4	43	(D)	(D)	(D)	2 843	1 387	(D)	(D)	24	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	*4	*14	*129	*456	*360	*335	(D)	(S)	(D)	73	48
1793	Glass and glazing work -----	6	14	206	996	(D)	527	734	(D)	—	(Z)	(D)
1794	Excavation work-----	18	58	1 447	5 457	(D)	3 487	1 119	(D)	(D)	26	(D)
1795	Wrecking and demolition work -----	3	(D)	361	(D)	(D)	(D)	554	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ---	4	61	2 072	6 865	(D)	3 835	(D)	(D)	—	(Z)	(D)
1799	Special trade contractors, n.e.c. -----	(S)	252	5 289	20 710	18 986	11 812	7 333	*1 724	414	8	13
	Manchester, NH PMSA											
15,16,17	Construction industries -----	504	3 407	87 906	396 764	286 943	157 297	137 693	109 821	4 018	5	5
	(See appropriate State for SIC detail.)											
	Nashua, NH PMSA											
15,16,17	Construction industries -----	359	2 564	69 678	304 805	209 941	135 141	90 245	94 864	2 972	3	3
	(See appropriate State for SIC detail.)											
	New Bedford, MA PMSA											
15,16,17	Construction industries -----	322	1 346	29 494	120 156	103 574	65 071	39 438	16 582	2 690	9	7
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	49	103	1 143	10 107	6 582	3 788	3 228	3 525	(D)	38	32
1522	Other residential buildings -----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1531	Operative builders -----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	226	(D)	(D)	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c. -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	1 986	(D)	(S)	(S)
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines -----	*7	93	3 276	17 716	(D)	8 583	3 883	(D)	(D)	14	(D)
1629	Heavy construction, n.e.c. -----	4	(D)	1 407	5 007	(D)	(D)	(D)	(D)	(D)	(D)	(D)

MA-18 MASSACHUSETTS

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON–WORCESTER–LAWRENCE, MA–NH–ME–CT CMSA—Con.											
	New Bedford, MA PMSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning -----	36	(S)	2 347	10 168	9 978	6 511	(S)	190	405	(S)	27
1721	Painting and paper hanging -----	*12	*12	*162	(D)	(D)	*286	*179	(D)	(D)	61	(D)
1731	Electrical work -----	37	*118	2 004	(D)	(D)	3 647	2 467	(D)	(D)	40	(D)
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work -----	(S)	*64	*1 231	*4 991	*4 983	*3 348	*1 634	(S)	—	47	45
1742	Plastering, drywall, and insulation work -----	*19	169	4 092	11 697	10 773	5 958	4 815	924	167	19	16
1743	Terrazzo, tile, marble, and mosaic work -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	(S)	(S)
175	Carpentry and floor work:											
1751	Carpentry -----	47	166	2 876	12 618	11 543	5 446	6 097	*1 075	(S)	32	29
1752	Floor laying and other floor work -----	*9	*26	*573	*2 247	*2 239	(D)	*1 174	8	*46	51	52
1761	Roofing, siding, and sheet metal work -----	*6	*82	1 937	6 770	(D)	4 009	*1 969	(D)	202	45	(D)
1771	Concrete work -----	*30	96	(S)	*7 195	*6 980	4 164	*2 821	*215	(S)	39	41
1781	Water well drilling -----	—	—	—	—	—	—	—	—	—	—	—
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1793	Glass and glazing work -----	1	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1794	Excavation work -----	(S)	117	3 309	12 586	10 999	8 633	2 614	1 587	(D)	6	8
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	*835	(S)	(S)
1799	Special trade contractors, n.e.c. -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
	Portsmouth–Rochester, NH–ME PMSA											
15,16,17	Construction industries -----	714	2 907	64 307	262 556	224 525	132 790	96 814	38 030	4 418	7	7
	(See appropriate State for SIC detail.)											
	Worcester, MA—CT PMSA											
15,16,17	Construction industries -----	1 112	8 958	290 127	959 896	752 864	472 223	289 233	207 032	8 326	3	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	(S)	(S)	(S)	(S)	(S)	(S)	18 336	(S)	422	(S)	(S)
1522	Other residential buildings -----	(S)	(D)	(D)	(S)	(S)	(S)	(D)	(S)	—	(D)	(S)
1531	Operative builders -----	(S)	101	(S)	(S)	(S)	(D)	(S)	(S)	—	32	(S)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	*24	146	(D)	10 840	7 356	4 252	3 144	3 484	—	39	32
1542	Nonresidential buildings, n.e.c. -----	54	432	13 752	150 316	48 175	24 827	24 617	102 142	848	14	10
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	25	169	(D)	20 032	(D)	11 732	5 348	(D)	(S)	13	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	*3	*30	*1 194	*5 276	(S)	*3 196	*1 294	(S)	(D)	62	(S)
1623	Water, sewer, and utility lines -----	32	300	8 477	25 440	23 257	16 360	6 914	2 183	247	28	18
1629	Heavy construction, n.e.c. -----	(S)	2 308	(D)	227 828	200 323	(D)	73 682	27 505	(D)	1	1

CONSTRUCTION—GEOGRAPHIC AREA SERIES

MASSACHUSETTS MA—19

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	BOSTON–WORCESTER–LAWRENCE, MA–NH–ME–CT CMSA—Con.											
	Worcester, MA–CT PMSA—Con.											
	Construction industries—Con.											
	Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning	152	887	22 828	77 802	66 953	39 451	28 298	10 848	(S)	15	14
	1721 Painting and paper hanging	55	192	3 487	8 869	8 561	(D)	3 016	*307	(D)	32	30
	1731 Electrical work	155	1 133	34 670	98 565	91 669	55 659	36 311	6 896	402	9	7
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work	*20	97	2 898	8 610	8 273	5 751	2 524	*337	304	23	16
	1742 Plastering, drywall, and insulation work	58	200	4 105	19 148	14 382	9 600	4 783	4 766	43	26	24
	1743 Terrazzo, tile, marble, and mosaic work	*3	(S)	*399	*1 632	*1 632	*472	*1 161	—	—	(S)	71
	175 Carpentry and floor work:											
	1751 Carpentry	94	331	8 640	40 102	31 241	20 108	11 744	*8 861	*30	19	22
	1752 Floor laying and other floor work	34	*110	*2 233	11 106	*10 151	*5 631	*4 520	*955	*186	42	40
	1761 Roofing, siding, and sheet metal work	(S)	(S)	5 001	(S)	(S)	(S)	(S)	*763	(S)	(S)	(S)
	1771 Concrete work	38	(D)	2 235	(D)	(D)	4 774	3 390	(S)	(D)	(D)	(D)
	1781 Water well drilling	11	123	4 207	(D)	(D)	(D)	4 455	*81	(D)	23	(D)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection	*13	(D)	(D)	(D)	(D)	(D)	4 041	(D)	(S)	(D)	(D)
	1793 Glass and glazing work	*15	*71	1 959	4 956	(D)	*3 257	*2 966	(D)	(S)	44	(D)
	1794 Excavation work	44	244	6 544	23 101	20 070	(D)	4 098	3 031	1 030	25	21
	1795 Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1796 Installing building equipment, n.e.c.	7	171	1 665	(D)	(D)	2 978	679	(D)	—	(Z)	(D)
	1799 Special trade contractors, n.e.c.	(S)	292	7 098	27 911	(D)	(D)	13 492	(D)	211	23	(D)
15,16, 17	PROVIDENCE–FALL RIVER–WARWICK, RI–MA MSA											
	Construction industries	3 085	15 423	395 978	1 984 282	1 394 678	850 380	588 115	589 604	21 873	1	1
	15 Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses	544	1 420	26 022	138 125	104 016	57 681	47 680	34 109	(S)	7	8
	1522 Other residential buildings	52	(D)	2 723	19 114	11 303	8 167	4 247	*7 811	*335	(D)	25
	1531 Operative builders	76	188	4 718	56 780	38 979	18 887	20 892	17 802	103	15	11
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses	(S)	429	16 497	(D)	(D)	24 208	(D)	(D)	640	5	(D)
	1542 Nonresidential buildings, n.e.c.	140	2 106	55 138	484 706	248 877	155 299	101 685	235 829	1 269	3	3
	16 Heavy construction other than building construction—contractors:											
	1611 Highway and street construction	35	927	30 210	127 377	105 937	71 876	49 410	21 440	3 777	6	3
162, 1622, 1623, 1629	Heavy construction, except highway:											
	1622 Bridge, tunnel, and elevated highway construction	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1623 Water, sewer, and utility lines	35	517	16 237	65 157	56 519	39 763	17 031	8 638	1 336	5	19
	1629 Heavy construction, n.e.c.	73	378	10 137	42 161	35 889	24 113	12 553	6 272	3 257	7	6
17	Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning	352	1 729	50 446	183 830	162 962	95 847	67 832	20 867	(S)	4	5
	1721 Painting and paper hanging	169	513	8 460	24 445	22 283	17 020	5 273	2 163	*457	10	7
	1731 Electrical work	368	1 650	44 128	131 524	128 313	74 737	55 818	3 212	1 784	4	3
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work	114	(S)	(S)	(S)	(S)	(S)	(S)	(S)	383	(S)	(S)
	1742 Plastering, drywall, and insulation work	119	715	18 283	54 538	51 387	34 828	16 690	3 151	431	9	6
	1743 Terrazzo, tile, marble, and mosaic work	(S)	87	1 494	6 626	6 341	3 552	2 891	(S)	15	19	17
	175 Carpentry and floor work:											
	1751 Carpentry	281	702	13 203	48 799	42 486	24 683	18 608	6 313	629	11	9
	1752 Floor laying and other floor work	50	141	3 441	16 824	15 373	8 787	6 911	1 451	(D)	3	2

MA—20 MASSACHUSETTS

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PROVIDENCE-FALL RIVER-WARWICK, RI-MA MSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1761	Roofing, siding, and sheet metal work	120	779	16 968	59 915	56 335	33 076	23 277	3 580	566	7	7
1771	Concrete work	135	629	13 182	45 149	39 438	24 626	16 740	5 710	1 177	8	8
1781	Water well drilling	12	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	16	(D)	(D)	(D)	(D)	(D)	7 097	(D)	(D)	(D)	(D)
1793	Glass and glazing work	23	154	6 255	(D)	(D)	10 498	13 114	(D)	(D)	8	(D)
1794	Excavation work	109	341	7 054	25 735	24 407	18 370	7 377	1 328	1 005	8	9
1795	Wrecking and demolition work	12	(D)	(D)	(D)	(D)	4 329	(D)	309	133	(D)	(D)
1796	Installing building equipment, n.e.c. ..	20	171	5 013	12 006	11 866	10 083	1 840	140	(D)	2	1
1799	Special trade contractors, n.e.c.	152	587	13 581	51 733	48 436	29 568	19 391	3 297	574	12	14
	SPRINGFIELD, MA MSA											
15,16,17	Construction industries	1 097	7 327	196 552	797 567	610 990	374 067	267 688	186 577	12 438	3	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	608	11 243	63 624	47 108	25 656	23 182	16 517	918	12	14
1522	Other residential buildings	(S)	*50	1 657	8 733	(D)	*1 989	*3 517	(D)	(S)	60	(D)
1531	Operative builders	33	88	1 689	24 883	17 680	13 527	4 316	7 203	(D)	33	34
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	19	256	7 651	30 379	18 556	13 151	5 446	11 824	263	39	32
1542	Nonresidential buildings, n.e.c.	42	552	18 592	109 112	51 453	24 627	27 034	57 658	(D)	8	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	25	394	13 545	43 579	35 672	24 952	18 612	7 906	1 106	11	8
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	72	(D)	(D)
1623	Water, sewer, and utility lines	11	135	3 708	13 947	12 356	6 281	6 702	1 591	(D)	26	17
1629	Heavy construction, n.e.c.	(S)	(S)	(S)	(D)	(D)	(S)	(S)	(S)	(D)	(S)	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning.....	138	1 054	35 997	158 013	120 025	70 158	50 938	37 988	2 024	5	4
1721	Painting and paper hanging.....	81	366	5 516	14 660	13 779	10 613	3 167	(S)	(D)	19	18
1731	Electrical work	109	785	22 302	66 570	66 340	43 409	23 330	230	549	6	6
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work.....	33	248	7 291	20 466	19 644	12 218	7 463	*822	180	12	7
1742	Plastering, drywall, and insulation work	(S)	(S)	8 676	24 184	21 842	(S)	7 404	2 342	(S)	(S)	9
1743	Terrazzo, tile, marble, and mosaic work	8	*40	*1 146	*2 524	(D)	*1 927	*1 575	(D)	(D)	48	(D)
175	Carpentry and floor work:											
1751	Carpentry	84	226	4 538	20 281	18 700	9 991	8 858	1 581	207	16	12
1752	Floor laying and other floor work ..	15	25	483	2 270	2 033	1 170	(D)	237	(D)	(Z)	(Z)
1761	Roofing, siding, and sheet metal work	58	467	11 229	52 748	46 178	25 613	22 906	6 570	599	12	10
1771	Concrete work	(S)	427	11 248	34 141	33 636	19 613	14 023	506	(S)	12	17
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	1 001	62	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	6	*36	*569	*1 427	*1 365	*1 013	*352	(S)	—	50	68
1793	Glass and glazing work	4	28	676	(D)	(D)	1 084	1 296	(D)	(D)	(Z)	(D)
1794	Excavation work	45	258	7 190	23 023	(D)	13 724	7 874	(D)	*397	22	(D)
1795	Wrecking and demolition work	*6	*74	844	*2 549	(D)	1 841	*1 047	(D)	(D)	59	(D)
1796	Installing building equipment, n.e.c. ..	*18	174	3 745	13 364	12 219	9 290	3 075	(S)	(S)	13	26
1799	Special trade contractors, n.e.c.	83	457	8 489	22 287	20 962	13 325	10 081	1 325	1 441	17	15

CONSTRUCTION—GEOGRAPHIC AREA SERIES

MASSACHUSETTS MA-21

Contents

New Hampshire

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for New Hampshire. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 15,163 establishments in this State operating in the construction industries. These establishments accounted for \$2.2 billion in total dollar value of business done.

Most of the 15,163 construction establishments were small. Of the total, 11,844 were nonemployers, and over half of the employer establishments had less than 5 employees. The 948 construction establishments with 5 employees or more, while representing only 6 percent of all establishments, accounted for more than 65 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$1.9 billion in total dollar value of business done. Of this amount, \$1.8 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$403 million, leaving net value of construction work of \$1.4 billion. In addition, these establishments paid out \$717 million for the cost of

materials, fuels, power, rental of equipment and buildings, and the cost of selected purchased services. Value added for 1992 was \$815 million. (See Introduction and appendices for explanation of terms.)

There were 3,319 establishments with total employment averaging 17,158 during the year. Total payroll for 1992 was \$412 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 11,844 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$380 million. Most of these establishments, about 82 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

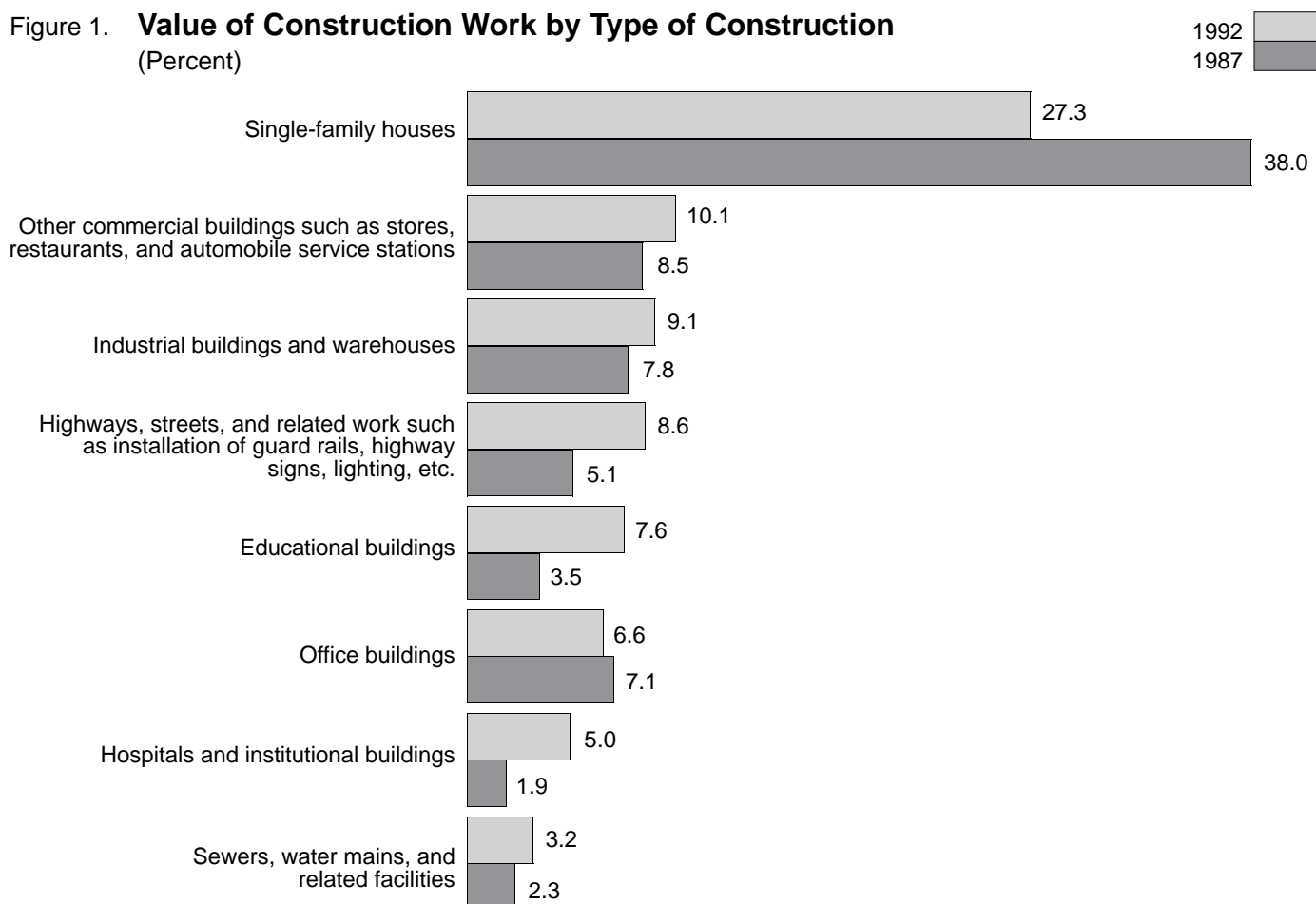


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

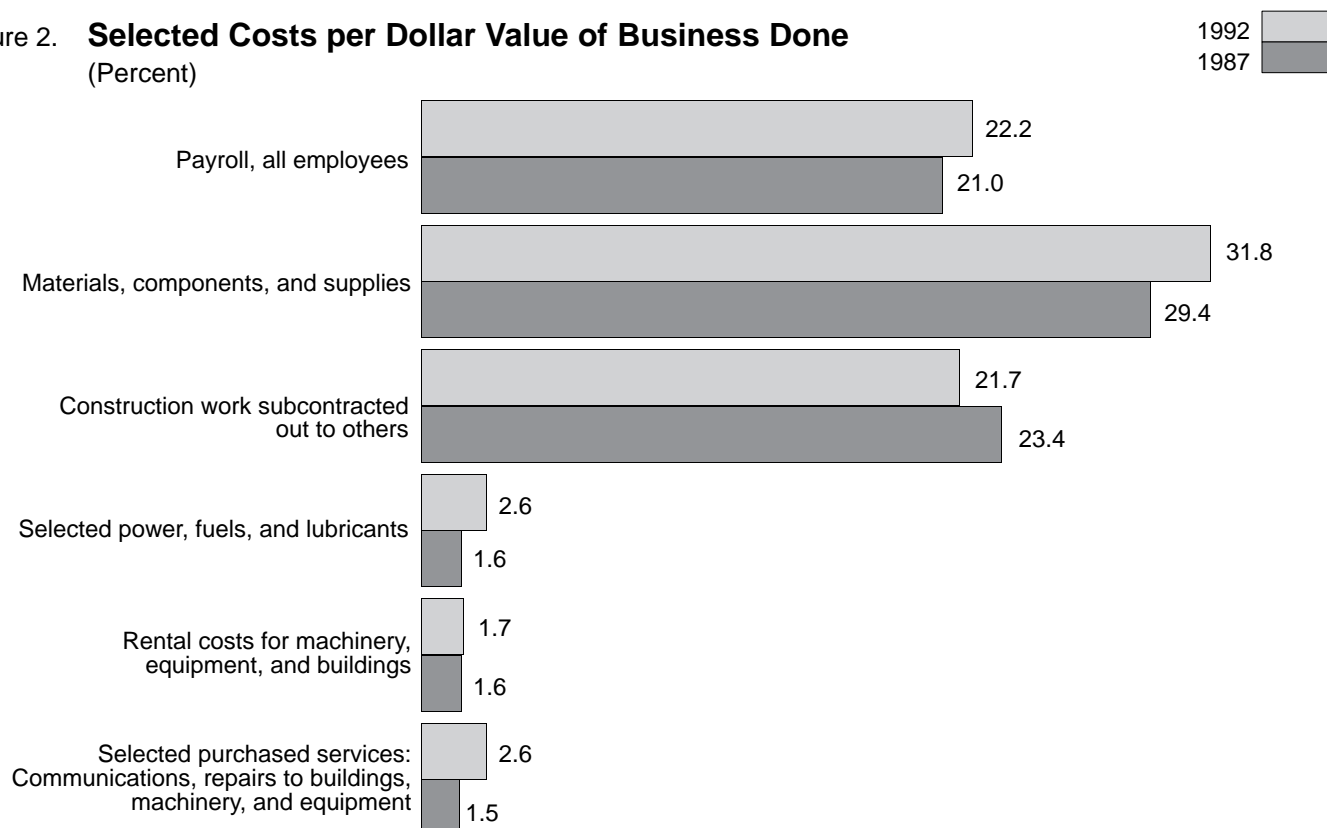


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	15 163	13 318	17 158	2 236 230	11 844	11 735	380 154	3 319	1 583	17 158	1 856 076	1	1
15	Building construction—General contractors and operative builders ----	2 970	2 343	4 285	785 834	1 973	1 863	127 838	997	480	4 285	657 996	3	3
16	Heavy construction other than building construction—contractors -----	417	234	2 829	376 389	175	165	6 037	242	(S)	2 829	370 352	4	3
17	Special trade contractors -----	11 776	10 742	10 044	1 074 006	9 696	9 707	246 279	2 080	1 035	10 044	827 727	2	2
1711	Plumbing, heating, and air-conditioning --	1 307	1 096	2 436	256 596	877	890	34 285	430	(S)	2 436	222 311	4	4
1731	Electrical work-----	1 140	922	1 496	136 122	803	799	19 379	337	123	1 496	116 743	5	5
	1987													
15, 16, 17	Construction industries² -----	17 600	13 723	37 889	4 643 307	12 263	12 146	911 273	5 337	1 577	37 889	3 732 034	1	2
15	Building construction—General contractors and operative builders ----	4 390	2 850	14 068	2 250 374	2 555	2 389	341 761	1 835	461	14 068	1 908 613	2	4
16	Heavy construction other than building construction—contractors -----	467	213	4 492	468 167	178	176	14 131	289	37	4 492	454 036	3	3
17	Special trade contractors -----	12 136	10 164	19 016	1 701 011	9 012	9 103	373 141	3 124	1 061	19 016	1 327 870	2	2
1711	Plumbing, heating, and air-conditioning --	1 165	829	3 796	352 083	643	642	35 615	522	187	3 796	316 468	4	4
1731	Electrical work-----	1 021	745	2 609	189 867	603	599	22 717	418	146	2 609	167 150	4	4

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹-----	3 319	17 158	12 885	412 461	287 567	1 772 094	1 368 654	814 793
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses-----	728	2 170	1 633	35 315	26 538	197 702	147 215	73 417
1522	Other residential buildings-----	26	115	88	3 315	1 868	*11 333	8 019	7 313
1531	Operative builders-----	85	350	146	9 452	2 881	108 196	78 713	38 399
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses-----	60	332	223	6 827	4 240	32 450	19 792	14 667
1542	Nonresidential buildings, n.e.c.-----	97	1 318	889	40 692	22 660	281 158	105 920	73 333
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction-----	69	1 270	1 007	40 732	29 622	155 132	133 850	84 442
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction-----	7	120	86	3 715	2 575	19 636	12 598	7 687
1623	Water, sewer, and utility lines-----	36	432	356	10 925	7 549	34 125	30 745	21 786
1629	Heavy construction, n.e.c.-----	129	1 006	778	25 999	18 717	122 719	94 521	48 805
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning-----	430	2 436	1 735	65 601	46 841	219 830	191 975	109 344
1721	Painting and paper hanging-----	183	524	435	8 019	6 390	25 931	22 945	16 529
1731	Electrical work-----	337	1 496	1 134	37 299	26 156	114 711	112 656	64 166
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework-----	79	259	224	5 200	4 378	16 384	15 839	9 854
1742	Plastering, drywall, and insulation work-----	105	967	781	25 301	18 965	91 165	77 917	43 560
1743	Terrazzo, tile, marble, and mosaic work-----	8	22	17	399	318	1 771	1 667	903
175	Carpentry and floor work:								
1751	Carpentry-----	247	672	554	12 533	10 174	55 730	46 986	27 654
1752	Floor laying and other floor work-----	48	188	149	4 195	3 245	22 722	21 013	9 682
1761	Roofing, siding, and sheet metal work-----	114	656	454	13 361	7 975	45 895	43 628	(D)
1771	Concrete work-----	145	603	521	12 532	10 120	43 811	42 321	26 256
1781	Water well drilling-----	32	139	100	3 506	2 463	12 019	(D)	6 989
179	Miscellaneous special trade contractors:								
1791	Structural steel erection-----	39	336	262	7 833	5 597	21 405	20 064	14 154
1793	Glass and glazing work-----	19	101	64	2 412	1 498	*8 635	(D)	*6 089
1794	Excavation work-----	170	604	493	12 464	10 554	50 293	45 552	33 003
1795	Wrecking and demolition work-----	9	73	61	(D)	1 108	6 110	(D)	(D)
1796	Installing building equipment, n.e.c.-----	16	282	215	7 022	5 272	23 168	22 203	16 179
1799	Special trade contractors, n.e.c.-----	101	687	480	(D)	9 864	50 063	47 144	31 776

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
637 843	403 440	526 999	31 296	29 122	367 591	37 889	3 547 066	1 608 817	1	1	5	15, 16, 17
												15
76 548	50 487	14 531	2 119	2 085	24 026	5 936	478 134	196 197	6	6	25	152
1 384	*3 315	408	*208	*250	*3 110	1 232	143 207	50 741	27	34	63	1521
42 062	29 484	(S)	525	(S)	7 670	2 843	540 503	184 272	10	11	(S)	1531
8 483	12 658	*1 409	482	98	5 264	764	(D)	33 391	20	19	31	154
51 208	175 238	16 992	2 389	2 032	28 495	3 293	498 313	141 497	4	7	9	1541
												1542
												16
(D)	21 282	35 615	8 252	5 034	82 880	2 222	211 118	115 444	5	5	7	1611
6 385	7 038	2 587	599	215	6 536	130	15 740	8 174	18	15	(Z)	162
9 333	3 380	8 432	561	1 283	20 352	776	64 422	40 062	13	13	31	1622
48 171	28 198	28 143	2 688	7 394	49 137	1 364	123 510	73 299	7	6	10	1623
												1629
												17
85 113	27 855	100 535	3 658	2 733	25 752	3 796	309 159	158 470	4	4	15	1711
(D)	2 987	12 816	289	285	2 447	1 155	42 409	33 941	13	12	30	1721
50 522	2 055	61 179	1 696	1 301	13 936	2 609	166 088	93 314	5	5	17	1731
6 021	545	12 983	234	*152	3 572	1 015	50 120	32 393	11	8	44	174
34 477	13 248	78 699	1 242	(S)	(S)	2 179	167 717	85 716	7	6	(S)	1741
767	103	1 599	(S)	(S)	58	124	8 474	4 794	4	7	(S)	1742
												1743
20 373	8 743	19 346	684	376	6 689	1 916	100 491	54 041	8	10	24	175
11 528	1 709	13 130	134	196	(S)	166	10 852	5 576	11	10	(Z)	1751
22 547	2 267	21 113	1 016	571	9 079	1 145	79 974	44 879	8	8	18	1752
16 243	1 490	27 607	790	969	12 115	1 485	90 859	52 940	11	13	24	1761
4 889	(D)	*3 263	152	217	(S)	179	18 609	12 641	25	(D)	27	1771
												1781
(D)	1 341	19 314	463	*186	3 645	357	20 045	15 766	14	13	51	179
(D)	(D)	3 571	(S)	(D)	1 251	154	12 531	6 117	30	(D)	(D)	1791
17 182	4 741	17 035	1 610	2 074	28 668	1 565	143 366	102 587	13	12	38	1793
(D)	(D)	(D)	231	(D)	2 559	(S)	(S)	(S)	7	(D)	(D)	1794
6 306	965	12 048	244	159	1 531	162	16 844	10 525	1	1	(Z)	1795
16 215	2 919	(D)	780	474	4 718	918	59 667	35 242	12	15	21	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	3 319	5 337	2 693	3 000	1	1	3	5
Proprietors and working partners.....	1 583	1 577	1 093	1 795	3	6	6	8
All employees**	17 158	37 889	23 234	17 548	1	1	2	3
Construction workers:								
March.....	10 253	26 487	15 669	11 481	2	2	2	3
May	13 109	30 487	19 592	15 552	2	1	2	3
August	14 675	33 082	21 493	17 465	1	1	2	3
November	13 501	29 500	19 381	16 311	2	1	2	4
Average	12 885	29 889	19 318	15 220	1	1	2	3
Other employees:								
March.....	4 263	7 806	3 889	2 176	2	3	3	4
May	4 133	7 900	(NA)	(NA)	2	2	(NA)	(NA)
August	4 326	8 283	(NA)	(NA)	2	2	(NA)	(NA)
November	4 373	8 012	(NA)	(NA)	2	2	(NA)	(NA)
Average	4 274	8 000	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	412 461	782 587	415 353	174 003	1	1	1	3
Payroll, construction workers	287 567	554 077	331 372	141 663	1	1	1	3
Payroll, other employees	124 894	228 509	83 981	32 340	2	2	2	3
First-quarter payroll, all employees	81 605	161 801	82 482	31 338	2	2	1	3
Fringe benefits, all employees	90 899	146 102	81 105	27 674	2	2	1	3
Legally required expenditures	67 308	109 439	52 681	19 936	2	2	2	3
Voluntary expenditures	23 591	36 662	28 423	7 738	2	2	1	2
Dollar value of business done	1 856 076	3 732 034	1 345 182	810 821	1	2	2	3
Value of construction work	1 772 094	3 547 066	1 306 758	775 529	1	2	2	3
Value of construction work subcontracted in from others	526 999	914 639	268 889	166 369	3	3	4	3
Other business receipts	83 982	92 048	31 570	35 292	3	3	5	13
Net value of construction†	1 368 654	2 673 614	1 067 783	604 260	1	2	2	3
Value added††	814 793	1 608 817	672 103	330 329	1	2	1	3
Selected costs	1 041 283	2 030 298	666 225	461 188	2	2	2	3
Materials, components, and supplies	589 821	1 095 647	392 959	273 876	2	2	2	3
Construction work subcontracted out to others	403 440	873 452	238 975	171 269	3	4	3	7
Selected power, fuels, and lubricants	48 022	61 198	34 290	16 043	3	2	2	4
Electricity.....	6 707	8 072	5 094	1 944	6	3	3	5
Natural gas	2 422	1 239	833	500	5	7	17	18
Gasoline and diesel fuel	31 482	43 992	25 786	11 726	4	2	2	5
On highway use	23 914	32 428	(NA)	(NA)	4	2	(NA)	(NA)
Off highway use	7 568	11 564	(NA)	(NA)	5	3	(NA)	(NA)
Other, including lubricating oils and greases.....	7 411	7 894	2 577	1 872	3	2	5	10
Rental cost for machinery, equipment, and buildings	31 296	58 379	13 918	13 751	4	3	3	4
For machinery and equipment	19 460	44 800	10 292	11 965	5	4	4	3
For buildings.....	11 837	13 578	3 625	1 786	6	4	6	8
Selected purchased services	48 203	54 830	22 317	24 658	4	3	4	26
Communication services	14 459	13 406	6 484	*10 292	7	3	7	61
Repairs to buildings and other structures	1 740	4 155	1 408	1 469	19	6	10	26
Repairs to machinery and equipment	32 004	37 268	14 424	12 898	5	4	4	4
Ownership of construction projects:								
Value of construction work	1 772 094	3 547 066	1 306 758	775 529	1	2	2	3
Government owned	448 446	394 625	208 992	155 598	4	5	7	4
Federal	118 976	104 290	(NA)	(NA)	5	13	(NA)	(NA)
State and local	329 471	290 335	(NA)	(NA)	5	5	(NA)	(NA)
Privately owned	1 323 648	3 152 441	1 097 766	619 931	2	2	2	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	362 102	507 928	4	3
Capital expenditures, other than land -----	29 122	90 998	5	4
New -----	20 020	75 026	5	4
Used -----	9 102	15 972	10	9
Retirements and disposition of depreciable assets -----	23 632	25 621	17	19
End-of-year gross book value of depreciable assets -----	367 591	573 305	4	3
Depreciation charges during year -----	36 085	69 439	3	4
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	50 476	80 324	5	6
Capital expenditures, other than land -----	3 252	15 847	8	9
New buildings and other structures -----	2 874	13 540	9	10
Used buildings and other structures -----	377	2 306	23	16
Retirements and disposition of depreciable assets -----	1 458	1 812	6	16
End-of-year gross book value of depreciable assets -----	52 269	94 359	6	5
Depreciation charges during year -----	4 135	6 396	6	6
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	311 627	427 604	4	4
Capital expenditures, other than land -----	25 870	75 151	5	4
New machinery and equipment, including automobiles and trucks -----	17 146	61 485	6	4
New automobiles and trucks, intended primarily for highway use -----	5 959	30 230	10	5
Used machinery and equipment, including automobiles and trucks -----	8 724	13 665	11	11
Retirements and disposition of depreciable assets -----	22 174	23 809	18	21
End-of-year gross book value of depreciable assets -----	315 323	478 946	4	3
Depreciation charges during year -----	31 950	63 042	4	4

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	3 319	1
Value of construction work	1 772 094	1
Establishments with inventories:		
Number	1 144	4
Value of construction work	931 743	2
Inventories ¹ :		
End of 1992, materials and supplies	34 550	5
End of 1991, materials and supplies	34 361	4
Establishments with no inventories:		
Number	1 083	5
Value of construction work	546 297	3
Establishments not reporting:		
Number	1 092	4
Value of construction work	294 054	4

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	3 319	2 371	557	237	126	20	7	1	—	—
All employees** -----	17 158	4 360	3 423	3 103	3 637	1 280	1 355	(D)	—	—
Payroll, all employees -----	412 461	72 709	72 334	75 805	102 570	43 132	45 912	(D)	—	—
Dollar value of business done -----	1 856 076	400 100	326 016	282 234	436 483	190 304	220 939	(D)	—	—
Value of construction work -----	1 772 094	394 036	320 431	274 299	424 283	171 971	187 074	(D)	—	—
Net value of construction work† -----	1 368 654	334 989	256 344	229 033	312 637	94 791	140 860	(D)	—	—
Value added†† -----	814 793	190 073	150 514	142 506	176 716	65 893	89 091	(D)	—	—
Cost of materials, components, supplies, and fuels -----	637 843	150 980	111 415	94 462	148 121	47 231	85 634	(D)	—	—
Cost of construction work subcontracted out to others -----	403 440	59 047	64 087	45 266	111 646	77 180	46 214	(D)	—	—
Rental cost for machinery, equipment, and buildings -----	31 296	5 510	4 375	5 015	7 023	2 349	7 025	(D)	—	—
Capital expenditures, other than land -----	29 122	6 429	4 772	3 801	5 666	2 023	6 431	(D)	—	—
End-of-year gross book value of depreciable assets -----	367 591	72 989	61 401	52 488	83 315	23 554	73 844	(D)	—	—
1987										
All employees** -----	37 889	(S)	7 649	7 462	7 866	3 456	3 614	1 508	(D)	—
Value of construction work -----	3 547 066	(S)	654 457	625 314	739 591	381 237	626 468	(D)	(D)	—
Value added†† -----	1 608 817	(S)	314 792	304 468	330 999	166 834	232 550	(D)	(D)	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	5	7	6	3	(Z)	(Z)	(D)	—	—
Net value of construction work† -----	1	5	7	6	3	(Z)	(Z)	(D)	—	—
Capital expenditures, other than land -----	5	15	15	20	1	(Z)	(Z)	(D)	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	3 319	(S)	(S)	546	1 081	594	340	237	76	31	17
All employees** -----	17 158	(S)	(S)	809	2 534	2 638	2 659	3 150	1 955	1 391	1 738
Payroll, all employees -----	412 461	(S)	(S)	10 333	39 071	49 232	58 964	84 058	58 928	44 986	64 169
Dollar value of business done -----	1 856 076	(S)	(S)	42 005	171 169	202 986	226 250	341 670	247 245	209 122	405 106
Value of construction work -----	1 772 094	(S)	(S)	41 627	167 724	200 003	221 048	331 247	240 662	204 867	354 557
Net value of construction work† -----	1 368 654	(S)	(S)	38 335	149 843	175 489	191 957	271 355	185 917	155 109	190 979
Value added†† -----	814 793	(S)	(S)	22 874	91 232	98 790	119 183	160 953	110 959	86 830	118 341
Cost of materials, components, supplies, and fuels -----	637 843	(S)	(S)	15 839	62 056	79 682	77 976	120 826	81 541	72 534	123 187
Cost of construction work subcontracted out to others -----	403 440	(S)	(S)	3 293	17 881	24 515	29 091	59 892	54 745	49 758	163 578
Rental cost for machinery, equipment, and buildings -----	31 296	(S)	(S)	567	3 152	2 834	2 926	5 860	5 254	2 733	7 799
Capital expenditures, other than land -----	29 122	(S)	(S)	444	4 237	2 811	3 560	4 601	3 125	2 740	7 433
End-of-year gross book value of depreciable assets -----	367 591	(S)	(S)	8 431	35 210	42 615	57 691	67 425	43 479	20 807	90 587
1987											
All employees** -----	37 889	(S)	(S)	(S)	(S)	5 357	5 449	7 873	4 001	3 501	5 107
Value of construction work -----	3 547 066	(S)	(S)	(S)	(S)	357 530	405 550	713 425	465 541	498 981	786 826
Value added†† -----	1 608 817	(S)	(S)	(S)	(S)	186 824	212 428	353 886	219 688	189 714	270 526
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	10	7	8	8	5	4	2	(Z)
Net value of construction work† -----	1	(S)	(S)	9	7	8	8	6	5	5	(Z)
Capital expenditures, other than land -----	5	(S)	(S)	38	19	18	21	17	2	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 772 094	884 992	515 950	260 266	1	2	3	3
Building construction	1 256 003	723 591	381 545	150 866	2	3	4	4
Single-family houses	483 246	305 907	122 383	54 956	4	5	6	7
Single-family houses, detached	452 528	290 465	113 479	48 584	4	6	7	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	30 718	15 442	8 904	6 372	12	13	25	18
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	35 157	15 939	8 318	10 900	10	17	13	11
Other residential buildings, including hotels, motels, and tourist cabins	26 473	22 968	2 094	1 411	23	27	21	13
Hotels, motels, and tourist cabins	15 475	12 711	1 501	1 263	4	2	25	14
Other residential buildings	*10 997	*10 257	593	(S)	56	60	37	(S)
Office buildings	116 109	47 238	55 953	12 918	5	3	9	10
Other commercial buildings such as stores, restaurants, and automobile service stations	178 527	101 952	50 412	26 163	4	4	8	9
Industrial buildings and warehouses	161 868	78 060	55 290	28 519	4	5	6	10
Industrial buildings	137 458	61 321	49 705	26 432	4	5	7	11
Warehouses	24 410	16 739	5 585	2 086	9	10	6	17
Educational buildings	134 349	77 835	48 599	7 916	5	3	14	6
Hospitals and institutional buildings	88 747	52 766	31 635	4 347	6	8	8	13
Other nonresidential buildings	31 527	20 927	6 864	3 737	5	5	12	9
Nonbuilding construction	405 205	161 401	134 405	109 399	3	5	3	7
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	151 867	34 895	57 385	59 587	5	17	4	6
Bridges, tunnels, and elevated highways	29 547	9 217	15 301	5 029	8	24	(Z)	5
Power and communication transmission lines, towers, and related facilities	19 642	(D)	5 617	5 617	14	(D)	(D)	8
Sewers, water mains, and related facilities	56 813	37 606	7 556	11 651	7	8	15	13
Sewers, sewer lines, septic systems, and related facilities	35 560	23 094	4 290	8 177	8	7	22	15
Water mains and related facilities	21 253	14 513	3 266	3 474	11	15	11	14
Blast furnaces, petroleum refineries, chemical complexes, etc.	17 135	(D)	(D)	6 952	5	(D)	(D)	7
Sewage treatment and water treatment plants	56 102	27 259	27 764	*1 079	5	2	9	50
Sewage treatment plants	38 656	(D)	(D)	*386	2	(D)	(D)	55
Water treatment plants	17 446	(D)	(D)	*693	12	(D)	(D)	47
Other nonbuilding construction	74 100	38 861	15 754	19 485	10	7	13	32
Construction work, n.s.k.	110 886	(NA)	(NA)	(NA)	8	(NA)	(NA)	(NA)
1987								
Value of construction work	3 547 066	2 550 131	540 937	248 532	2	2	3	4
Building construction	2 837 370	2 171 448	474 531	172 579	2	3	3	4
Single-family houses	1 349 553	1 110 225	159 636	79 691	4	5	6	7
Single-family houses, detached	985 560	762 642	150 355	72 561	4	5	7	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	363 992	347 582	9 280	7 129	12	13	10	17
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	258 498	220 413	21 622	16 463	5	5	17	11
Other residential buildings, including hotels, motels, and tourist cabins	131 429	90 897	32 728	7 803	8	8	17	23
Hotels, motels, and tourist cabins	55 670	44 063	8 684	2 922	8	9	16	13
Other residential buildings	75 759	46 834	24 044	4 880	10	9	22	35
Office buildings	252 415	176 035	63 900	12 480	3	3	5	10
Other commercial buildings such as stores, restaurants, and automobile service stations	302 376	223 242	62 415	16 718	3	3	9	13
Industrial buildings and warehouses	275 516	211 852	42 257	21 406	2	2	3	7
Industrial buildings	239 394	183 492	36 969	18 933	2	3	4	7
Warehouses	36 121	28 360	5 288	2 473	4	4	6	18
Educational buildings	125 504	71 991	48 012	5 500	4	5	8	7
Hospitals and institutional buildings	67 797	34 897	28 064	4 835	5	9	4	7
Other nonresidential buildings	74 282	48 195	16 177	9 915	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	502 232	362 384	66 126	73 721	3	3	6	7
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	180 080	123 998	17 148	38 933	5	5	12	8
Power and communication transmission lines, towers, and related facilities	19 478	12 158	4 747	2 572	7	7	5	13
Sewers, water mains, and related facilities	82 851	67 060	10 000	5 790	9	9	18	38
Sewers, sewer lines, septic systems, and related facilities	59 301	49 033	7 137	3 129	11	11	23	34
Water mains and related facilities	23 550	18 026	2 863	*2 660	10	8	11	45
Sewage treatment and water treatment plants	36 664	30 020	6 156	487	10	10	9	5
Other nonbuilding construction	242 460	178 182	35 212	29 069	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	207 464	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. **Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	3 319	12 885	10 253	13 109	14 675	13 501	1	1	2	2	1	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	728	1 633	1 437	1 595	1 809	1 691	4	7	7	7	7	8
1522	Other residential buildings -----	26	88	78	92	94	90	35	29	28	30	28	29
1531	Operative builders -----	85	146	(S)	148	185	140	14	9	(S)	8	14	8
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	60	223	234	193	216	248	24	22	20	22	22	31
1542	Nonresidential buildings, n.e.c. ---	97	889	821	883	973	880	16	5	5	4	4	5
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	69	1 007	441	1 111	1 379	1 099	20	5	9	5	5	5
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	7	86	58	97	105	82	16	11	6	7	12	19
1623	Water, sewer, and utility lines -----	36	356	257	353	397	416	16	13	13	13	13	12
1629	Heavy construction, n.e.c. -----	129	778	483	798	955	874	13	7	8	6	6	8
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	430	1 735	1 567	1 796	1 828	1 750	4	4	4	4	4	5
1721	Painting and paper hanging -----	183	435	208	510	601	422	6	13	15	14	15	13
1731	Electrical work -----	337	1 134	1 002	1 055	1 288	1 189	3	4	4	5	5	6
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	79	224	146	216	239	294	9	12	17	12	8	11
1742	Plastering, drywall, and insulation work -----	105	781	738	766	750	869	8	8	7	12	6	12
1743	Terrazzo, tile, marble, and mosaic work -----	8	17	(S)	14	(S)	16	13	6	(S)	(Z)	(S)	(Z)
175	Carpentry and floor work:												
1751	Carpentry -----	247	554	466	583	602	564	5	8	9	9	8	9
1752	Floor laying and other floor work --	48	149	128	156	157	156	18	12	13	10	11	11
1761	Roofing, siding, and sheet metal work -----	114	454	347	430	525	512	12	9	8	8	10	10
1771	Concrete work -----	145	521	341	556	654	534	11	12	16	11	10	12
1781	Water well drilling -----	32	100	83	96	117	106	13	25	24	25	24	26
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	39	262	223	277	244	303	22	14	12	17	14	15
1793	Glass and glazing work -----	19	64	54	54	67	80	39	23	14	14	22	37
1794	Excavation work -----	170	493	399	550	572	450	13	13	16	12	13	13
1795	Wrecking and demolition work -----	9	61	56	70	66	50	27	8	4	10	11	5
1796	Installing building equipment, n.e.c. -----	16	215	169	200	233	255	4	1	2	1	1	1
1799	Special trade contractors, n.e.c. ---	101	480	387	510	595	428	13	12	15	12	11	14

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	5.2	24.0	137.5	.233	.360	.228	.297	.018
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.0	16.3	121.1	.179	.387	.255	.074	.011
1522	Other residential buildings -----	4.4	28.8	128.8	.292	.122	.292	*.036	.018
1531	Operative builders -----	4.1	27.0	741.1	.087	.389	.273	(S)	.005
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	5.5	20.6	145.5	.210	.261	.390	.043	.015
1542	Nonresidential buildings, n.e.c. -----	13.6	30.9	316.3	.145	.182	.623	.060	.008
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	18.3	32.1	154.1	.263	(D)	.137	.230	.053
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	16.1	31.0	228.3	.189	.325	.358	.132	.031
1623	Water, sewer, and utility lines -----	11.9	25.3	95.9	.320	.273	.099	.247	.016
1629	Heavy construction, n.e.c. -----	7.8	25.8	157.7	.212	.393	.230	.229	.022
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	5.7	26.9	126.7	.298	.387	.127	.457	.017
1721	Painting and paper hanging -----	2.9	15.3	59.6	.309	(D)	.115	.494	.011
1731	Electrical work -----	4.4	24.9	101.2	.325	.440	.018	.533	.015
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	3.3	20.1	73.1	.317	.368	.033	.792	.014
1742	Plastering, drywall, and insulation work -----	9.2	26.2	116.7	.278	.378	.145	.863	.014
1743	Terrazzo, tile, marble, and mosaic work -----	2.9	18.1	104.2	.225	.433	.058	.903	(S)
175	Carpentry and floor work:								
1751	Carpentry -----	2.7	18.7	100.6	.225	.366	.157	.347	.012
1752	Floor laying and other floor work -----	3.9	22.3	152.5	.185	.507	.075	.578	.006
1761	Roofing, siding, and sheet metal work -----	5.8	20.4	101.1	.291	.491	.049	.460	.022
1771	Concrete work -----	4.2	20.8	84.1	.286	.371	.034	.630	.018
1781	Water well drilling -----	4.4	25.2	120.2	.292	.407	(D)	*.272	.013
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	8.7	23.3	81.7	.366	(D)	.063	.902	.022
1793	Glass and glazing work -----	5.3	23.9	134.9	.279	(D)	(D)	*.414	(S)
1794	Excavation work -----	3.6	20.6	102.0	.248	.342	.094	.339	.032
1795	Wrecking and demolition work -----	8.1	(D)	100.2	(D)	(D)	(D)	(D)	.038
1796	Installing building equipment, n.e.c. -----	17.3	24.9	107.8	.303	.272	.042	.520	.011
1799	Special trade contractors, n.e.c. -----	6.8	(D)	104.3	(D)	.324	.058	(D)	.016

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work subcontracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA											
15,16,17	Construction industries	12 243	81 838	2 373 923	10 850 651	7 795 632	4 779 944	3 171 595	3 055 019	114 237	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	5 708	110 750	706 759	493 053	242 509	263 814	213 705	6 606	5	5
1522	Other residential buildings	175	813	22 429	112 671	72 527	46 531	29 106	40 144	807	13	12
1531	Operative builders	385	1 578	44 821	682 250	442 959	218 538	236 385	239 291	2 619	7	14
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	156	1 029	32 600	206 537	101 940	73 206	30 157	104 597	(S)	10	6
1542	Nonresidential buildings, n.e.c.	661	7 636	251 621	2 297 588	792 724	406 931	422 836	1 504 864	8 797	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	186	2 376	76 098	351 410	283 480	167 496	119 003	67 930	9 828	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	29	1 356	61 789	459 022	308 945	202 177	108 555	150 077	6 415	3	1
1623	Water, sewer, and utility lines	240	2 825	88 879	361 351	287 073	179 918	113 000	74 277	13 030	5	4
1629	Heavy construction, n.e.c.	265	5 716	231 386	916 111	708 579	507 539	208 904	207 533	11 223	1	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 823	11 509	353 357	1 207 486	1 033 712	613 810	435 086	173 774	10 922	2	2
1721	Painting and paper hanging	614	2 761	55 356	148 651	138 536	104 643	34 419	10 115	2 239	5	6
1731	Electrical work	1 468	10 685	339 496	1 016 518	969 186	600 178	382 086	47 332	8 411	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	2 317	51 729	165 144	154 433	107 492	47 573	10 711	1 838	10	5
1742	Plastering, drywall, and insulation work	429	3 271	89 477	287 958	256 401	164 927	94 202	31 557	2 020	9	9
1743	Terrazzo, tile, marble, and mosaic work	74	282	(S)	20 828	20 031	(S)	8 978	*797	(S)	17	12
175	Carpentry and floor work:											
1751	Carpentry	924	3 085	67 890	287 397	237 944	132 041	108 826	49 453	(S)	6	6
1752	Floor laying and other floor work	244	969	21 663	122 958	(D)	51 223	58 862	(D)	829	8	(D)
1761	Roofing, siding, and sheet metal work	431	2 833	71 126	252 638	232 396	138 680	96 777	20 242	(S)	5	5
1771	Concrete work	506	2 796	63 312	229 191	212 292	132 871	80 223	16 899	4 478	6	5
1781	Water well drilling	59	344	10 038	32 704	32 475	20 418	12 117	228	671	13	12
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	97	1 818	58 940	150 435	(D)	103 748	34 133	(D)	2 110	7	(D)
1793	Glass and glazing work	98	527	12 828	41 966	41 197	26 199	18 892	(S)	*174	10	12
1794	Excavation work	417	2 138	55 937	206 929	181 644	135 178	55 880	25 285	5 767	9	8
1795	Wrecking and demolition work	(S)	342	8 672	33 380	29 628	25 313	4 978	3 752	537	2	2
1796	Installing building equipment, n.e.c.	104	2 698	74 030	219 189	212 956	159 611	54 929	6 233	1 411	1	1
1799	Special trade contractors, n.e.c.	502	4 428	111 827	333 580	308 834	206 493	111 877	24 745	8 170	5	5
	Boston, MA-NH PMSA											
15,16,17	Construction industries	6 890	49 004	1 486 300	7 345 622	5 037 835	3 091 565	2 036 809	2 307 788	63 841	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	3 300	68 901	446 379	300 398	146 791	162 628	145 980	3 439	7	7
1522	Other residential buildings	108	576	17 037	91 317	56 843	34 837	24 428	34 474	(D)	15	12
1531	Operative builders	221	861	24 309	415 801	250 657	125 846	130 415	*165 143	1 510	11	24
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	57	482	(D)	151 294	66 669	49 476	17 696	84 625	(S)	14	7
1542	Nonresidential buildings, n.e.c.	427	5 608	188 819	1 816 995	622 029	302 192	337 134	1 194 965	5 478	4	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	113	1 150	38 991	163 678	131 639	85 092	47 667	32 039	4 683	6	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	20	1 272	58 855	446 559	(D)	194 891	105 912	(D)	6 201	3	(D)
1623	Water, sewer, and utility lines	135	1 610	55 071	229 030	175 225	104 244	74 843	53 805	5 833	6	5
1629	Heavy construction, n.e.c.	139	2 531	96 601	602 815	439 445	337 881	106 030	163 370	6 046	3	2

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA—Con.											
	Boston, MA-NH PMSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 097	7 427	246 148	829 498	706 013	421 599	295 600	123 486	6 448	3	2
1721	Painting and paper hanging	348	1 991	42 231	110 551	103 511	79 234	24 457	7 040	1 576	6	7
1731	Electrical work	858	6 808	228 362	699 973	664 540	413 695	262 297	35 433	6 639	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	1 735	39 407	124 325	117 102	82 266	35 431	7 223	1 325	14	6
1742	Plastering, drywall, and insulation work	200	1 494	42 452	120 064	114 562	81 324	33 691	5 502	(S)	18	18
1743	Terrazzo, tile, marble, and mosaic work	47	(S)	(S)	16 654	15 935	(D)	6 758	*719	(D)	(S)	12
175	Carpentry and floor work:											
1751	Carpentry	505	1 907	42 807	173 543	145 637	77 855	69 287	27 906	(S)	9	7
1752	Floor laying and other floor work	(S)	588	13 525	80 814	(D)	32 349	38 454	(D)	329	9	(D)
1761	Roofing, siding, and sheet metal work	235	1 420	40 173	144 553	130 610	78 548	52 888	13 944	(S)	8	8
1771	Concrete work	242	1 528	37 792	(D)	(D)	73 824	39 999	(D)	1 391	9	(D)
1781	Water well drilling	22	62	1 539	(D)	(D)	3 939	2 470	(S)	(S)	14	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	34	520	(D)	(D)	(D)	(D)	23 075	(D)	1 549	21	(D)
1793	Glass and glazing work	50	313	7 179	23 131	22 535	(D)	9 010	(S)	(D)	11	11
1794	Excavation work	215	1 219	32 813	120 403	104 691	77 081	34 606	15 712	3 542	14	12
1795	Wrecking and demolition work	18	145	3 977	(D)	(D)	(D)	908	(D)	(D)	4	(D)
1796	Installing building equipment, n.e.c.	76	2 197	62 831	186 000	(D)	136 850	47 176	(D)	505	1	(D)
1799	Special trade contractors, n.e.c.	285	2 057	(D)	152 174	(D)	89 054	53 950	(D)	2 525	8	(D)
	Brockton, MA PMSA											
15,16,17	Construction industries	545	3 110	82 089	306 915	253 477	165 924	94 379	53 437	3 003	4	3
	(See appropriate State for SIC detail.)											
	Fitchburg-Leominster, MA PMSA											
15,16,17	Construction industries	269	1 302	32 635	128 736	104 319	61 979	46 007	24 417	1 269	10	9
	(See appropriate State for SIC detail.)											
	Lawrence, MA-NH PMSA											
15,16,17	Construction industries	817	5 082	124 320	496 532	402 893	259 128	152 254	93 639	14 205	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	(S)	6 079	48 303	34 584	17 814	17 537	13 719	1 116	(S)	13
1522	Other residential buildings	*7	*19	442	(D)	(D)	(D)	448	(D)	(D)	47	(D)
1531	Operative builders	23	110	3 757	39 156	30 742	19 658	11 819	8 414	190	7	7
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	20	101	1 867	10 948	5 743	4 372	1 448	5 205	(D)	30	16
1542	Nonresidential buildings, n.e.c.	(S)	311	8 405	50 208	24 485	13 487	11 543	25 724	392	10	11
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	10	80	2 771	12 624	11 404	5 346	(D)	1 220	214	8	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	20	309	8 912	34 174	29 710	19 713	10 212	4 464	3 807	8	10
1629	Heavy construction, n.e.c.	19	323	9 008	31 617	22 158	11 784	11 486	9 459	1 015	2	1

CONSTRUCTION—GEOGRAPHIC AREA SERIES

NEW HAMPSHIRE NH-15

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA—Con.											
	Lawrence, MA-NH PMSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	105	532	14 311	44 270	40 775	26 349	14 683	3 494	746	7	7
1721	Painting and paper hanging-----	36	69	1 109	5 292	(D)	2 829	1 359	(D)	161	5	(D)
1731	Electrical work-----	86	347	8 525	27 756	26 542	15 926	11 099	*1 214	182	14	14
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	(S)	120	2 148	6 578	6 227	4 493	1 734	351	(S)	17	7
1742	Plastering, drywall, and insulation work-----	24	197	4 965	15 163	14 254	10 026	4 233	909	68	12	15
1743	Terrazzo, tile, marble, and mosaic work-----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry-----	48	183	3 668	15 010	(D)	6 059	4 943	(D)	149	17	(D)
1752	Floor laying and other floor work---	10	70	1 572	6 865	(D)	2 766	3 707	(D)	76	15	(D)
1761	Roofing, siding, and sheet metal work-----	25	175	2 915	11 383	10 758	5 877	4 881	625	269	7	6
1771	Concrete work-----	26	(D)	4 333	13 495	11 729	6 478	5 325	1 766	343	(D)	6
1781	Water well drilling-----	7	37	1 058	3 335	3 323	2 170	1 212	*12	(D)	28	29
179	Miscellaneous special trade contractors:											
1791	Structural steel erection-----	*9	(D)	(S)	(D)	(D)	(S)	(S)	(D)	(D)	(D)	(D)
1793	Glass and glazing work-----	*13	*46	*1 354	(D)	(D)	(S)	*2 455	(D)	(D)	66	(D)
1794	Excavation work-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work-----	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
1796	Installing building equipment, n.e.c.---	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.---	47	1 017	25 164	69 803	63 989	51 652	14 901	5 814	4 639	5	5
	Lowell, MA-NH PMSA											
15,16,17	Construction industries-----	711	4 158	107 067	528 670	419 261	238 826	188 724	109 408	9 495	3	4
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses-----	96	309	5 515	36 626	26 767	10 710	(S)	(S)	(S)	16	21
1522	Other residential buildings-----	*5	(S)	*759	(S)	(S)	(S)	(S)	(S)	—	(S)	(S)
1531	Operative builders-----	33	207	6 136	93 229	66 412	34 617	35 840	26 817	*482	20	16
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(S)	(S)	(D)
1542	Nonresidential buildings, n.e.c.-----	35	212	4 483	31 329	15 843	8 568	7 340	15 486	*2	29	18
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction-----	8	(S)	11 231	(D)	(D)	25 147	(D)	(D)	(S)	(S)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines-----	12	110	3 204	9 669	9 082	6 905	2 207	587	(D)	17	15
1629	Heavy construction, n.e.c.-----	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	114	477	12 485	58 368	47 336	28 430	18 941	*11 032	469	15	14
1721	Painting and paper hanging-----	46	151	(S)	(S)	(S)	(D)	1 671	(S)	229	20	(S)
1731	Electrical work-----	101	827	22 284	65 275	64 568	36 458	28 112	707	318	10	8
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	18	69	(S)	3 791	3 661	2 446	1 215	*129	(D)	21	21
1742	Plastering, drywall, and insulation work-----	28	183	6 169	21 152	(D)	10 722	7 217	(D)	*100	16	(D)
1743	Terrazzo, tile, marble, and mosaic work-----	—	—	—	—	—	—	—	—	—	—	—
175	Carpentry and floor work:											
1751	Carpentry-----	55	94	1 422	5 997	4 764	2 830	2 024	*1 232	(D)	24	21
1752	Floor laying and other floor work---	9	41	975	4 677	4 429	1 345	3 084	248	71	20	10
1761	Roofing, siding, and sheet metal work-----	(S)	259	8 177	20 196	19 198	13 995	(S)	998	173	17	14

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA—Con.											
	Lowell, MA-NH PMSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1771	Concrete work	29	260	5 086	35 071	(D)	17 543	13 125	(D)	1 769	13	(D)
1781	Water well drilling	4	43	(D)	(D)	(D)	2 843	1 387	(D)	(D)	24	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	*4	*14	*129	*456	*360	*335	(D)	(S)	(D)	73	48
1793	Glass and glazing work	6	14	206	996	(D)	527	734	(D)	—	(Z)	(D)
1794	Excavation work	18	58	1 447	5 457	(D)	3 487	1 119	(D)	(D)	26	(D)
1795	Wrecking and demolition work	3	(D)	361	(D)	(D)	(D)	554	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	4	61	2 072	6 865	(D)	3 835	(D)	(D)	(Z)	(D)	(D)
1799	Special trade contractors, n.e.c.	(S)	252	5 289	20 710	18 986	11 812	7 333	*1 724	414	8	13
	Manchester, NH PMSA											
15,16,17	Construction industries	504	3 407	87 906	396 764	286 943	157 297	137 693	109 821	4 018	5	5
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	85	221	2 645	(S)	(S)	(S)	(S)	(S)	(D)	27	(S)
1522	Other residential buildings	*11	*34	(S)	*2 173	*2 129	(S)	*506	(S)	*165	64	74
1531	Operative builders	*19	83	2 081	24 765	18 641	*6 680	12 037	*6 124	(D)	29	28
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	5	48	1 389	5 571	3 619	3 690	*616	1 952	*13 584	17	35
1542	Nonresidential buildings, n.e.c.	32	359	14 002	99 097	34 201	22 978	16 125	64 897		12	7
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	*7	191	(D)	(D)	(D)	8 731	(D)	(D)	441	19	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	*6	87	1 941	(D)	(D)	3 755	2 532	(D)	(S)	23	(D)
1629	Heavy construction, n.e.c.	(S)	(S)	(D)	(S)	(S)	(D)	(S)	(S)	(S)	(S)	(S)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	79	739	20 396	84 590	66 575	30 110	36 788	18 016	723	11	10
1721	Painting and paper hanging	48	167	2 708	7 818	7 032	5 125	1 916	*786	—	34	34
1731	Electrical work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	*974	(S)	(S)	(S)
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	*9	13	127	(D)	(D)	(S)	*388	(D)	(S)	35	(D)
1742	Plastering, drywall, and insulation work	(S)	185	4 463	18 247	(D)	6 236	7 595	(D)	(D)	34	(D)
1743	Terrazzo, tile, marble, and mosaic work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	21	75	2 000	*10 893	(D)	4 237	*4 194	(D)	(D)	23	(D)
1752	Floor laying and other floor work	7	52	1 244	9 758	8 813	3 922	4 911	945	(D)	15	6
1761	Roofing, siding, and sheet metal work	*25	150	3 207	11 349	11 256	6 959	4 542	*93	(D)	26	24
1771	Concrete work	23	*68	*1 618	*7 130	*6 904	*5 320	*1 584	226	*117	41	65
1781	Water well drilling	(S)	(S)	(D)	(S)	(S)	(S)	(D)	—	—	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	12	111	2 086	4 453	4 279	3 076	1 204	174	(D)	32	30
1793	Glass and glazing work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1794	Excavation work	*22	82	2 005	6 772	6 098	5 347	1 587	674	(D)	22	39
1795	Wrecking and demolition work	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c.	5	(D)	892	(D)	(D)	(D)	312	148	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	(S)	147	3 907	10 886	10 606	7 008	3 630	280	(D)	31	27

CONSTRUCTION—GEOGRAPHIC AREA SERIES

NEW HAMPSHIRE NH-17

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA—Con.											
	Nashua, NH PMSA											
15,16,17	Construction industries	359	2 564	69 678	304 805	209 941	135 141	90 245	94 864	2 972	3	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings	*3	(S)	(S)	*6 950	*4 106	*3 975	(D)	*2 845	*65	(S)	53
1531	Operative builders	(S)	(S)	3 046	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(S)	*348	*1 381	*1 052	*608	*496	*329	—	(S)	56
1542	Nonresidential buildings, n.e.c.	12	375	11 915	82 554	20 018	19 212	12 499	62 536	1 059	(Z)	(Z)
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	(D)	(D)	(D)	(D)	(D)	(S)	(D)	(D)	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1629	Heavy construction, n.e.c.	*11	65	1 528	4 636	4 390	3 270	1 473	(S)	(S)	20	30
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	(S)	285	8 667	22 773	21 445	13 430	9 167	1 328	248	13	11
1721	Painting and paper hanging	16	44	583	2 905	2 739	2 123	616	166	53	(Z)	(Z)
1731	Electrical work	35	246	7 058	19 632	19 454	11 329	8 737	*177	*337	15	10
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	14	230	777	(D)	481	287	(D)	(D)	(Z)	(D)
1742	Plastering, drywall, and insulation work	35	513	14 683	51 317	44 498	24 870	19 675	6 819	161	7	7
1743	Terrazzo, tile, marble, and mosaic work	—	—	—	—	—	—	—	—	—	—	—
175	Carpentry and floor work:											
1751	Carpentry	27	78	1 390	8 065	7 092	4 264	(S)	973	47	17	24
1752	Floor laying and other floor work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1761	Roofing, siding, and sheet metal work	(S)	(S)	(S)	(S)	(D)	(S)	1 612	(D)	(D)	(S)	(D)
1771	Concrete work	17	114	2 948	7 354	6 945	5 625	1 320	409	(D)	19	16
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	—	—	—	—	—	—	—	—	—	—	—
1793	Glass and glazing work	3	19	460	(D)	(D)	849	718	(D)	—	(Z)	(D)
1794	Excavation work	9	(D)	(D)	(D)	(D)	1 248	465	(D)	(D)	(D)	(D)
1795	Wrecking and demolition work	(S)	(S)	(S)	(D)	(D)	(S)	(S)	(D)	—	(S)	(D)
1796	Installing building equipment, n.e.c.	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	19	113	2 778	7 350	6 642	4 592	2 050	*708	—	28	25
	New Bedford, MA PMSA											
15,16,17	Construction industries	322	1 346	29 494	120 156	103 574	65 071	39 438	16 582	2 690	9	7

(See appropriate State for SIC detail.)

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BOSTON–WORCESTER–LAWRENCE, MA–NH–ME–CT CMSA—Con.											
	Portsmouth–Rochester, NH–ME PMSA											
15,16, 17	Construction industries	714	2 907	64 307	262 556	224 525	132 790	96 814	38 030	4 418	7	7
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	538	8 472	45 437	35 262	17 551	18 087	10 175	680	21	20
1522	Other residential buildings	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1531	Operative builders	*20	47	1 136	*15 200	*10 391	*2 394	*7 997	*4 809	(D)	38	55
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	*13	*87	1 929	*9 286	*6 631	*3 829	*2 802	2 655	54	53	47
1542	Nonresidential buildings, n.e.c.	(S)	34	1 141	6 885	2 271	1 445	(S)	(S)	(D)	28	34
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1623	Water, sewer, and utility lines	*12	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
1629	Heavy construction, n.e.c.	*16	98	2 092	11 821	(D)	5 541	3 904	(D)	*759	32	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	(S)	540	14 696	44 988	41 963	27 053	14 987	3 026	(S)	12	11
1721	Painting and paper hanging	21	97	(S)	2 560	2 354	2 074	590	*206	(S)	31	35
1731	Electrical work	76	255	7 383	24 665	24 489	14 432	10 131	177	(D)	21	24
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	*39	*588	(D)	*1 976	*1 204	*777	(D)	(D)	59	46
1742	Plastering, drywall, and insulation work	*12	30	623	2 595	(D)	1 353	1 210	(D)	(D)	25	(D)
1743	Terrazzo, tile, marble, and mosaic work	3	(D)	(S)	*265	*258	*159	*102	*6	(D)	(D)	45
175	Carpentry and floor work:											
1751	Carpentry	53	113	1 853	7 771	6 528	4 019	2 511	*1 243	(S)	29	26
1752	Floor laying and other floor work ..	*26	55	*1 174	*4 941	*4 631	*2 259	*2 378	310	(D)	37	44
1761	Roofing, siding, and sheet metal work	*33	167	2 665	12 495	11 792	7 679	*4 196	703	(D)	29	35
1771	Concrete work	47	191	3 281	13 733	13 551	6 591	7 058	*183	*405	36	34
1781	Water well drilling	*5	*36	*921	*3 133	*3 133	*1 992	*1 141	—	*62	65	57
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	*14	*60	*1 121	*3 865	(D)	*2 412	*1 333	(D)	(S)	53	(D)
1793	Glass and glazing work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1794	Excavation work	42	*145	*2 644	*8 062	*7 605	*5 009	*3 508	*458	(D)	42	44
1795	Wrecking and demolition work	1	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ..	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1799	Special trade contractors, n.e.c.	(S)	116	*4 338	*13 453	*12 286	*7 427	*5 334	*1 167	45	35	49
	Worcester, MA—CT PMSA											
15,16, 17	Construction industries	1 112	8 958	290 127	959 896	752 864	472 223	289 233	207 032	8 326	3	3
	(See appropriate State for SIC detail.)											

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Rhode Island. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 8,767 establishments in this State operating in the construction industries. These establishments accounted for \$2.0 billion in total dollar value of business done.

Most of the 8,767 construction establishments were small. Of the total, 5,901 were nonemployers, and over half of the employer establishments had less than 5 employees. The 698 construction establishments with 5 employees or more, while representing only 8 percent of all establishments, accounted for more than 74 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$1.85 billion in total dollar value of business done. Of this amount, \$1.81 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$551 million, leaving net value of construction work of \$1.3 billion. In addition, these establishments paid out \$585 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$767 million. (See Introduction and appendixes for explanation of terms.)

There were 2,866 establishments with total employment averaging 13,981 during the year. Total payroll for 1992 was \$359 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 5,901 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$196 million. Most of these establishments, about 82 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

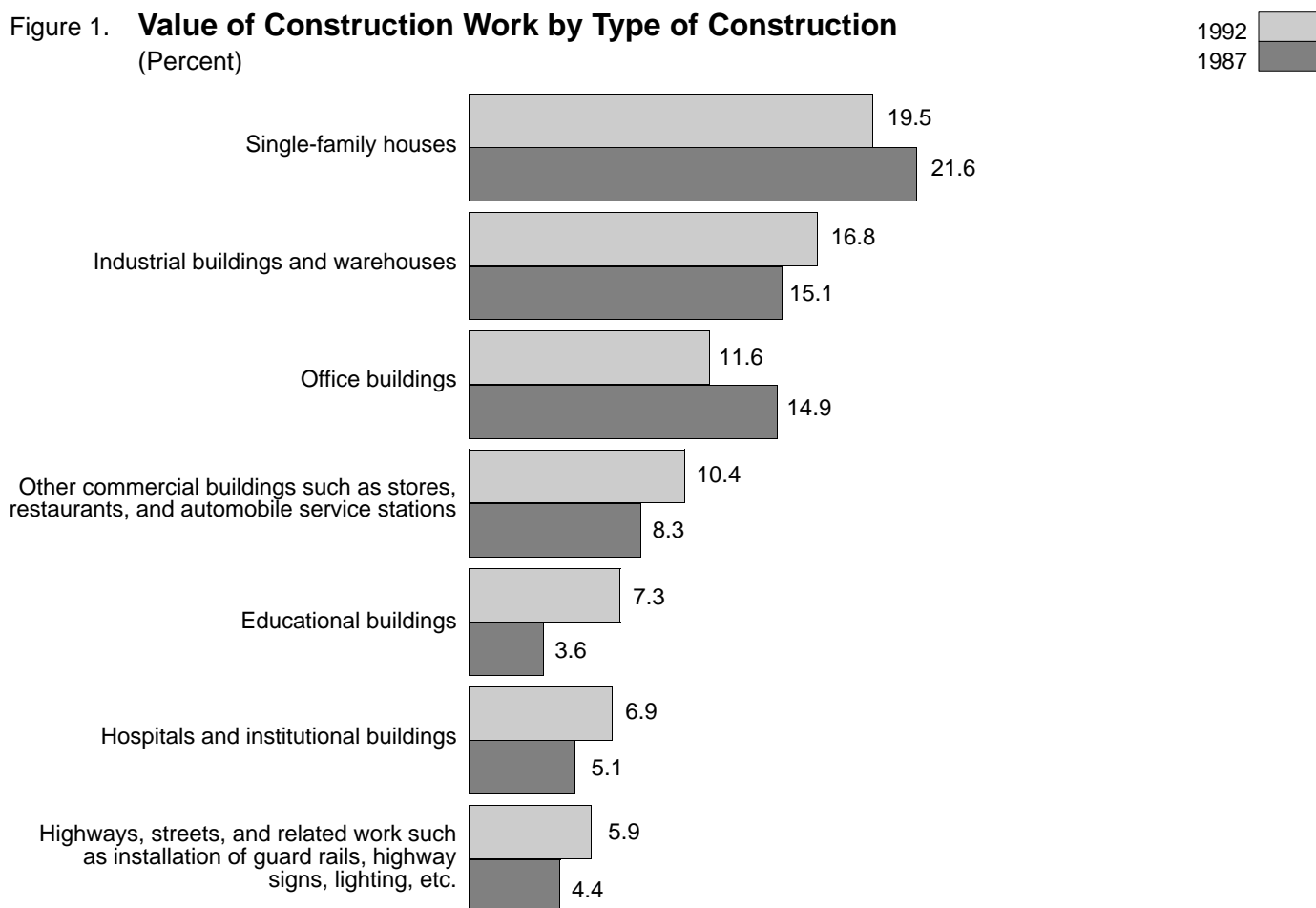


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

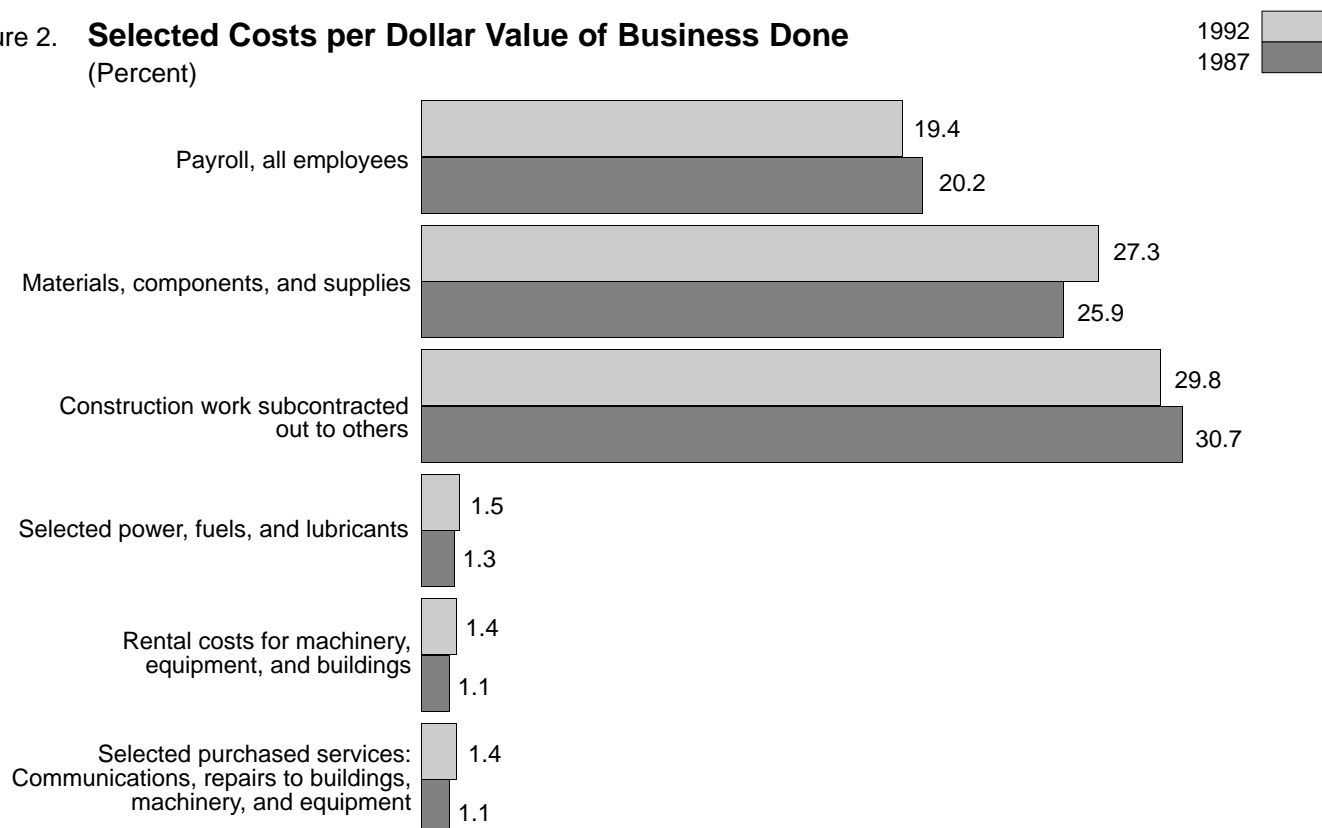


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done	Number	Proprie- tors and working partners	Dollar value of business done ¹	Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	8 767	6 177	13 981	2 045 908	5 901	5 510	195 953	2 866	667	13 981	1 849 955	(Z)	(Z)
15	Building construction—General contractors and operative builders ----	1 822	936	4 060	997 605	988	780	76 508	834	156	4 060	921 097	3	2
16	Heavy construction other than building construction—contractors -----	170	62	1 705	234 644	57	44	3 230	113	(S)	1 705	231 414	3	5
17	Special trade contractors -----	6 775	5 179	8 217	813 659	4 856	4 686	116 215	1 919	493	8 217	697 444	2	2
1711	Plumbing, heating, and air-conditioning --	710	412	1 603	181 993	382	346	13 631	328	66	1 603	168 362	4	5
1731	Electrical work -----	695	421	1 364	124 743	365	337	8 150	330	84	1 364	116 593	4	3
	1987													
15, 16, 17	Construction industries ² -----	9 269	6 403	20 328	2 693 125	6 094	5 895	365 595	3 175	508	20 328	2 327 530	2	2
15	Building construction—General contractors and operative builders ----	2 157	1 179	6 331	1 290 523	1 216	1 050	125 482	941	129	6 331	1 165 041	3	3
16	Heavy construction other than building construction—contractors -----	174	46	1 913	227 004	48	44	2 477	126	2	1 913	224 527	7	4
17	Special trade contractors -----	6 695	4 986	11 854	1 054 018	4 631	4 610	140 405	2 064	376	11 854	913 613	2	3
1711	Plumbing, heating, and air-conditioning --	654	405	1 885	192 737	345	341	15 924	309	64	1 885	176 813	5	6
1731	Electrical work -----	605	392	1 883	150 402	318	310	9 489	287	82	1 883	140 913	5	3

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	2 866	13 981	10 587	359 207	255 114	1 808 866	1 258 332	766 729
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	545	1 380	1 024	25 384	17 000	131 643	97 821	53 838
1522	Other residential buildings -----	49	135	100	2 654	1 711	18 650	10 964	7 931
1531	Operative builders -----	78	182	118	4 082	2 649	39 879	27 335	12 769
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	27	397	290	15 760	10 896	(D)	70 119	22 762
1542	Nonresidential buildings, n.e.c. -----	135	1 967	1 330	51 098	29 382	461 519	243 186	153 531
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	29	826	644	27 075	20 213	104 286	86 445	58 181
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	4	137	106	(D)	4 371	24 169	18 043	(D)
1623	Water, sewer, and utility lines -----	24	426	340	12 786	10 241	52 138	45 177	31 849
1629	Heavy construction, n.e.c. -----	56	316	238	8 121	6 155	(D)	30 325	(D)
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	328	1 603	1 151	46 309	33 235	167 687	149 698	87 159
1721	Painting and paper hanging -----	186	546	449	9 342	7 173	26 041	23 583	18 162
1731	Electrical work -----	330	1 364	997	38 153	26 768	114 924	112 062	63 961
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	102	(D)	(S)	(S)	(S)	(D)	(D)	(S)
1742	Plastering, drywall, and insulation work -----	104	609	513	14 971	11 896	43 086	40 424	28 090
1743	Terrazzo, tile, marble, and mosaic work -----	40	87	72	1 494	1 249	6 626	6 341	3 552
175	Carpentry and floor work:								
1751	Carpentry -----	255	640	550	12 041	10 320	47 435	41 709	24 171
1752	Floor laying and other floor work -----	43	118	96	2 940	2 508	13 859	13 002	7 922
1761	Roofing, siding, and sheet metal work -----	113	703	537	14 501	10 268	48 614	46 422	29 436
1771	Concrete work -----	106	434	346	9 590	7 529	31 613	27 421	15 911
1781	Water well drilling -----	14	50	33	1 228	886	5 205	5 180	3 538
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	15	212	164	9 811	7 548	29 926	(D)	18 939
1793	Glass and glazing work -----	23	135	95	5 693	2 711	29 904	(D)	(D)
1794	Excavation work -----	99	310	236	6 285	4 728	23 662	22 079	16 201
1795	Wrecking and demolition work -----	12	(D)	98	(D)	1 769	(D)	(D)	4 329
1796	Installing building equipment, n.e.c. -----	14	120	87	4 075	2 730	9 085	9 005	7 834
1799	Special trade contractors, n.e.c. -----	135	555	436	12 746	9 151	46 248	43 588	27 110

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
532 692	550 534	421 959	26 508	20 166	231 347	20 328	2 271 298	952 879	(Z)	2	12	15, 16, 17
												15
44 831	33 823	8 690	(S)	(S)	(S)	2 249	183 421	69 702	7	9	(S)	152
4 144	*7 686	2 611	*360	*335	2 237	352	84 692	18 048	30	26	50	1521
15 579	12 545	*173	81	103	3 612	860	153 474	34 451	17	16	34	1531
(D)	(D)	16 827	2 347	(D)	7 995	950	269 141	41 493	5	1	(D)	154
97 470	218 332	17 270	2 629	1 271	9 994	1 920	448 428	96 451	3	4	24	1542
												16
(D)	17 840	13 746	4 905	3 506	68 874	764	102 715	66 265	6	3	11	1611
(D)	6 126	4 809	1 143	652	4 307	87	16 094	7 264	(Z)	(Z)	(Z)	162
13 424	6 961	7 290	1 197	939	13 450	686	62 913	36 510	6	23	32	1622
(D)	(D)	(D)	2 971	*2 897	*9 582	376	39 435	22 710	10	10	74	1623
												17
63 214	17 989	66 037	1 917	(S)	12 731	1 885	172 903	83 344	4	5	(S)	1711
5 430	2 459	10 406	303	*437	3 198	877	38 086	29 191	9	7	44	1721
49 769	2 862	49 926	927	1 727	12 359	1 883	138 815	87 134	4	3	35	1731
(D)	(S)	(S)	(S)	324	3 775	1 068	79 431	52 490	(D)	(D)	33	174
12 346	2 662	34 169	290	325	3 654	1 196	90 488	59 429	11	7	7	1742
2 891	(S)	2 645	32	15	615	106	8 102	4 789	19	17	(Z)	1743
18 328	5 726	20 613	566	700	5 922	1 093	81 351	44 877	12	9	17	175
5 199	857	7 038	134	*63	513	140	16 202	9 064	4	2	58	1751
16 985	2 192	24 342	678	500	8 559	947	58 734	32 773	9	8	37	1761
(D)	4 191	15 231	1 131	1 083	13 156	716	49 511	34 543	7	6	5	1771
1 642	25	1 375	17	185	3 651	76	7 709	5 074	4	6	12	1781
(D)	(D)	(D)	(D)	(D)	3 181	162	19 833	18 505	9	(D)	(D)	179
11 519	(D)	24 834	280	108	2 104	207	14 657	8 136	9	(D)	36	1791
6 642	1 583	9 747	642	*1 096	17 976	470	40 253	31 671	8	10	45	1793
(D)	309	(D)	(D)	133	2 007	87	8 546	7 560	(D)	(D)	9	1794
1 208	80	1 432	63	40	721	114	13 140	8 748	2	1	(Z)	1795
16 981	2 660	16 055	685	391	6 075	827	57 342	33 461	14	13	24	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	2 866	3 175	2 315	2 463	1	1	4	5
Proprietors and working partners.....	667	508	506	865	6	11	9	11
All employees**	13 981	20 328	14 686	14 587	(Z)	2	2	2
Construction workers:								
March.....	9 007	13 578	9 475	9 227	2	2	3	3
May	10 697	15 855	11 681	13 415	2	2	3	3
August	11 926	17 631	11 848	13 491	2	2	3	3
November	10 717	16 225	11 532	12 443	2	2	3	3
Average	10 587	15 822	11 366	12 154	1	2	2	3
Other employees:								
March.....	3 417	4 329	3 263	2 334	2	3	3	4
May	3 388	4 467	(NA)	(NA)	2	3	(NA)	(NA)
August	3 339	4 537	(NA)	(NA)	2	3	(NA)	(NA)
November	3 434	4 688	(NA)	(NA)	2	3	(NA)	(NA)
Average	3 394	4 505	(NA)	(NA)	2	3	(NA)	(NA)
Payroll, all employees	359 207	469 283	247 027	170 715	1	1	2	2
Payroll, construction workers	255 114	336 540	176 814	130 162	1	1	2	2
Payroll, other employees	104 093	132 743	70 213	40 553	2	2	1	2
First-quarter payroll, all employees	75 811	95 226	51 658	31 266	2	2	2	2
Fringe benefits, all employees	102 195	112 206	49 740	35 456	2	2	2	1
Legally required expenditures	66 439	75 272	35 404	19 540	2	2	2	2
Voluntary expenditures	35 756	36 934	14 336	15 916	3	2	2	1
Dollar value of business done	1 849 955	2 327 530	1 309 141	749 175	(Z)	2	1	2
Value of construction work	1 808 866	2 271 298	1 289 115	731 923	1	2	1	2
Value of construction work subcontracted in from others	421 959	453 958	235 353	149 059	3	5	3	3
Other business receipts	41 089	28 202	(D)	17 252	4	4	(D)	3
Net value of construction†	1 258 332	1 557 753	733 482	516 015	2	2	2	2
Value added††	766 729	952 879	471 711	322 994	2	2	2	2
Selected costs	1 083 226	1 346 621	832 246	422 440	2	2	1	2
Materials, components, and supplies	504 458	603 065	258 289	194 141	2	3	2	2
Construction work subcontracted out to others	550 534	713 545	555 633	215 908	2	2	1	2
Selected power, fuels, and lubricants	28 233	30 010	18 324	12 392	2	3	4	3
Electricity.....	4 915	3 952	2 442	2 059	4	8	4	4
Natural gas	2 216	1 249	1 109	858	2	11	4	6
Gasoline and diesel fuel	19 194	22 895	13 522	7 834	3	2	4	3
On highway use	14 836	18 926	(NA)	(NA)	3	3	(NA)	(NA)
Off highway use	4 357	3 969	(NA)	(NA)	6	6	(NA)	(NA)
Other, including lubricating oils and greases.....	1 909	1 912	1 249	1 640	6	8	11	9
Rental cost for machinery, equipment, and buildings	26 508	26 281	16 758	9 202	2	4	3	3
For machinery and equipment	16 843	17 951	14 174	7 716	3	5	4	3
For buildings.....	9 664	8 329	2 583	1 486	4	4	5	6
Selected purchased services	25 738	26 030	13 224	10 993	3	3	3	3
Communication services	10 228	8 764	5 142	3 713	4	4	4	4
Repairs to buildings and other structures	1 160	1 679	665	761	7	9	10	12
Repairs to machinery and equipment	14 351	15 586	7 416	6 519	3	4	6	4
Ownership of construction projects:								
Value of construction work	1 808 866	2 271 298	1 289 115	731 923	1	2	1	2
Government owned	392 806	337 059	214 718	205 114	3	5	5	2
Federal	60 117	81 835	(NA)	(NA)	6	9	(NA)	(NA)
State and local	332 689	255 224	(NA)	(NA)	3	5	(NA)	(NA)
Privately owned	1 416 060	1 934 239	1 074 396	526 809	2	2	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	221 991	185 309	3	4
Capital expenditures, other than land -----	20 166	42 928	12	8
New -----	15 596	36 178	15	9
Used -----	4 570	6 750	14	11
Retirements and disposition of depreciable assets -----	10 809	7 350	7	11
End-of-year gross book value of depreciable assets -----	231 347	220 888	3	4
Depreciation charges during year -----	24 598	30 375	4	6
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	31 674	42 279	6	9
Capital expenditures, other than land -----	4 334	5 215	39	28
New buildings and other structures -----	* 3 578	4 126	47	35
Used buildings and other structures -----	755	1 088	31	17
Retirements and disposition of depreciable assets -----	(S)	*941	(S)	45
End-of-year gross book value of depreciable assets -----	35 573	46 552	7	8
Depreciation charges during year -----	3 085	5 560	7	9
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	190 317	143 030	3	4
Capital expenditures, other than land -----	15 832	37 713	7	8
New machinery and equipment, including automobiles and trucks -----	12 017	32 051	8	9
New automobiles and trucks, intended primarily for highway use -----	4 943	18 429	15	10
Used machinery and equipment, including automobiles and trucks -----	3 815	5 661	15	12
Retirements and disposition of depreciable assets -----	10 375	6 408	7	11
End-of-year gross book value of depreciable assets -----	195 773	174 335	3	5
Depreciation charges during year -----	21 513	24 814	4	7

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	2 866	1
Value of construction work	1 808 866	1
Establishments with inventories:		
Number	758	4
Value of construction work	512 055	3
Inventories ¹ :		
End of 1992, materials and supplies	18 844	7
End of 1991, materials and supplies	19 156	7
Establishments with no inventories:		
Number	1 005	4
Value of construction work	481 840	5
Establishments not reporting:		
Number	1 102	4
Value of construction work	814 971	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	2 866	2 168	437	167	66	19	6	(S)	—	1
All employees** -----	13 981	3 688	2 770	2 200	1 769	1 322	2 232	(D)	—	(D)
Payroll, all employees -----	359 207	66 630	65 355	62 159	51 961	54 966	58 136	(D)	—	(D)
Dollar value of business done -----	1 849 955	344 016	281 582	274 679	190 718	251 118	507 842	(D)	—	(D)
Value of construction work -----	1 808 866	340 497	278 412	270 049	185 872	248 709	485 328	(D)	—	(D)
Net value of construction work† -----	1 258 332	283 889	206 862	213 839	137 908	415 833	(D)	(D)	—	(D)
Value added†† -----	766 729	164 631	125 422	135 147	90 191	120 282	131 056	(D)	—	(D)
Cost of materials, components, supplies, and fuels -----	532 692	122 777	84 610	83 323	52 563	189 418	(D)	(D)	—	(D)
Cost of construction work subcontracted out to others --	550 534	56 607	71 550	56 210	47 963	318 204	(D)	(D)	—	(D)
Rental cost for machinery, equipment, and buildings ----	26 508	3 577	2 781	3 994	3 043	6 601	6 511	(D)	—	(D)
Capital expenditures, other than land -----	20 166	7 419	3 038	4 078	1 332	2 283	2 016	(D)	—	(D)
End-of-year gross book value of depreciable assets ----	231 347	54 686	30 178	50 321	27 977	34 611	33 574	(D)	—	(D)
1987										
All employees** -----	20 328	4 253	4 114	4 045	3 677	1 774	1 163	1 300	—	—
Value of construction work -----	2 271 298	389 023	321 307	324 919	374 483	239 183	622 383	(D)	—	—
Value added†† -----	952 879	171 171	162 535	172 865	189 203	99 211	85 245	72 648	—	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	(Z)	4	7	6	7	(Z)	(Z)	(D)	—	(D)
Net value of construction work† -----	2	5	8	7	4	(Z)	(D)	(D)	—	(D)
Capital expenditures, other than land -----	12	27	13	18	7	(Z)	(Z)	(D)	—	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	2 866	(S)	(S)	546	817	436	250	174	46	25	20
All employees** -----	13 981	(S)	(S)	873	1 828	1 972	1 725	2 282	1 012	920	2 845
Payroll, all employees -----	359 207	(S)	(S)	11 767	32 294	40 376	41 624	66 504	32 843	36 477	92 629
Dollar value of business done -----	1 849 955	(S)	(S)	40 004	127 836	151 419	177 916	260 605	156 754	181 964	739 015
Value of construction work -----	1 808 866	(S)	(S)	39 728	126 827	150 056	173 332	258 262	154 474	178 810	712 983
Net value of construction work† -----	1 258 332	(S)	(S)	36 157	114 731	134 993	144 763	213 653	104 905	129 907	365 863
Value added†† -----	766 729	(S)	(S)	22 940	70 663	78 064	88 987	130 949	63 057	84 504	219 065
Cost of materials, components, supplies, and fuels -----	532 692	(S)	(S)	13 493	45 077	58 292	60 361	85 047	44 129	48 558	172 830
Cost of construction work subcontracted out to others -----	550 534	(S)	(S)	3 571	12 096	15 063	28 569	44 610	49 569	48 903	347 120
Rental cost for machinery, equipment, and buildings -----	26 508	(S)	(S)	(S)	(S)	2 263	1 964	3 642	1 814	2 942	11 729
Capital expenditures, other than land -----	20 166	(S)	(S)	(S)	1 740	* 4 364	2 908	2 417	2 172	1 494	3 393
End-of-year gross book value of depreciable assets -----	231 347	(S)	(S)	(S)	20 165	29 162	33 570	32 506	25 368	15 558	60 829
1987											
All employees** -----	20 328	(S)	(S)	(S)	(S)	2 983	2 540	3 891	2 228	1 072	3 288
Value of construction work -----	2 271 298	(S)	(S)	(S)	(S)	203 381	213 208	402 524	278 892	142 495	826 334
Value added†† -----	952 879	(S)	(S)	(S)	(S)	108 291	105 571	200 980	133 308	70 000	221 697
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	(S)	(S)	10	7	8	9	6	4	2	(Z)
Net value of construction work† -----	2	(S)	(S)	8	6	8	9	7	6	9	(Z)
Capital expenditures, other than land -----	12	(S)	(S)	(S)	17	44	19	24	3	20	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

RI-10 RHODE ISLAND

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 808 866	982 530	529 546	227 337	1	2	2	5
Building construction	1 460 564	812 587	466 346	181 631	2	2	3	6
Single-family houses	352 366	197 794	95 214	59 357	4	6	6	7
Single-family houses, detached	326 644	185 043	87 564	54 036	4	6	6	8
Single-family houses, attached, including townhouses and townhouse-type condominiums	25 722	12 751	7 650	(S)	8	10	13	(S)
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	46 792	13 677	16 338	16 777	12	9	12	25
Other residential buildings, including hotels, motels, and tourist cabins	20 211	12 372	5 748	2 091	9	13	11	13
Office buildings	209 098	110 932	81 707	16 459	3	4	5	10
Other commercial buildings such as stores, restaurants, and automobile service stations	188 100	94 680	67 834	25 586	7	9	8	14
Industrial buildings and warehouses	303 239	199 429	71 845	31 965	3	2	8	7
Industrial buildings	275 114	179 678	66 124	29 311	3	2	8	8
Warehouses	28 125	19 751	(S)	2 654	6	3	(S)	8
Religious buildings	20 502	(D)	10 204	(D)	9	(D)	13	(D)
Educational buildings	132 053	61 249	57 473	13 331	5	6	8	25
Hospitals and institutional buildings	124 384	64 821	51 977	7 585	1	1	2	7
Amusement, social, and recreational buildings, indoors	47 508	(D)	*3 958	(D)	4	(D)	41	(D)
Other nonresidential buildings	16 311	9 758	(S)	2 505	10	7	(S)	37
Nonbuilding construction	278 849	169 943	63 200	45 706	5	6	5	7
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	106 677	58 467	35 344	12 866	2	3	(Z)	5
Private driveways and parking areas	14 386	5 778	4 142	4 467	8	11	9	10
Bridges, tunnels, and elevated highways	36 994	29 689	5 057	2 249	2	3	2	10
Sewers, water mains, and related facilities	37 581	30 412	3 646	3 523	23	24	26	21
Sewers, sewer lines, septic systems, and related facilities	26 866	22 439	2 347	2 080	16	16	24	14
Water mains and related facilities	*10 715	*7 974	(S)	*1 443	41	46	(S)	43
Sewage treatment and water treatment plants	12 809	5 632	*5 131	2 046	18	3	46	4
Other nonbuilding construction	70 401	39 965	9 881	20 555	11	11	12	15
Construction work, n.s.k.	69 453	(NA)	(NA)	(NA)	9	(NA)	(NA)	(NA)
1987								
Value of construction work	2 271 298	1 410 719	541 660	186 349	2	2	2	3
Building construction	1 851 836	1 243 721	463 262	138 797	2	3	3	4
Single-family houses	490 427	359 680	88 204	42 542	6	8	7	8
Single-family houses, detached	400 689	283 912	80 609	36 167	7	9	8	9
Single-family houses, attached, including townhouses and townhouse-type condominiums	89 738	75 768	7 594	6 375	14	17	15	24
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	133 022	100 070	23 167	9 784	8	10	13	12
Other residential buildings, including hotels, motels, and tourist cabins	102 889	61 524	35 166	6 198	6	7	14	10
Office buildings	339 495	215 533	108 124	15 838	3	3	6	7
Other commercial buildings such as stores, restaurants, and automobile service stations	188 153	127 255	43 703	17 193	5	5	9	12
Industrial buildings and warehouses	342 621	253 600	61 603	27 417	3	3	5	12
Industrial buildings	262 305	183 358	53 830	25 116	4	4	5	13
Warehouses	80 315	70 241	7 773	2 300	3	3	6	12
Religious buildings	22 720	8 955	7 975	5 789	21	33	36	14
Educational buildings	81 690	40 307	33 056	8 326	3	2	5	12
Hospitals and institutional buildings	116 887	59 530	52 335	5 021	1	1	2	17
Other nonresidential buildings	33 932	20 577	9 929	3 435	6	5	23	17
Nonbuilding construction	286 892	163 688	78 397	44 806	3	4	5	6
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	99 201	44 627	36 705	17 869	5	8	8	3
Sewers, water mains, and related facilities	65 506	35 987	22 229	7 289	5	7	2	6
Sewers, sewer lines, septic systems, and related facilities	39 331	19 739	15 295	4 295	3	3	2	7
Water mains and related facilities	26 175	16 248	6 933	2 993	10	14	3	11
Other nonbuilding construction	122 185	83 074	19 463	19 648	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	132 570	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	2 866	10 587	9 007	10 697	11 926	10 717	1	1	2	2	2	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	545	1 024	940	1 039	1 108	1 009	5	7	8	8	7	7
1522	Other residential buildings -----	49	100	83	108	109	98	27	31	36	29	30	30
1531	Operative builders -----	78	118	120	122	115	113	16	19	18	17	16	18
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	27	290	258	274	321	306	34	6	6	5	6	6
1542	Nonresidential buildings, n.e.c. ----	135	1 330	1 307	1 322	1 445	1 246	12	3	4	3	3	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	29	644	299	714	788	775	12	6	7	6	6	6
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	4	106	(D)	115	92	(D)	(Z)	(Z)	(D)	(Z)	(Z)	(D)
1623	Water, sewer, and utility lines -----	24	340	246	351	394	370	14	5	4	5	4	6
1629	Heavy construction, n.e.c. -----	56	238	(D)	252	(D)	251	20	10	(D)	9	(D)	9
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	328	1 151	1 024	1 115	1 270	1 193	4	4	5	5	4	5
1721	Painting and paper hanging -----	186	449	267	466	575	486	2	10	12	9	11	13
1731	Electrical work -----	330	997	996	906	1 126	959	3	5	4	4	7	4
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	102	(S)	(S)	(S)	(S)	(S)	8	(S)	(S)	(S)	(S)	(S)
1742	Plastering, drywall, and insulation work -----	104	513	520	504	511	515	17	12	12	11	12	12
1743	Terrazzo, tile, marble, and mosaic work -----	40	72	65	77	73	71	26	23	16	30	32	23
175	Carpentry and floor work:												
1751	Carpentry -----	255	550	450	571	617	562	7	12	12	14	13	11
1752	Floor laying and other floor work --	43	96	81	103	111	87	7	5	5	4	4	5
1761	Roofing, siding, and sheet metal work -----	113	537	472	580	552	545	9	10	11	10	10	12
1771	Concrete work -----	106	346	170	423	433	357	10	6	11	6	7	6
1781	Water well drilling -----	14	33	25	33	38	34	(Z)	4	5	4	3	4
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	15	164	138	153	188	176	28	5	3	3	8	4
1793	Glass and glazing work -----	23	95	94	100	94	93	13	12	7	10	15	15
1794	Excavation work -----	99	236	185	234	266	260	11	8	9	8	7	7
1795	Wrecking and demolition work -----	12	98	82	94	(D)	(D)	12	6	7	6	(D)	(D)
1796	Installing building equipment, n.e.c. -----	14	87	91	84	86	87	10	3	5	2	3	2
1799	Special trade contractors, n.e.c. ----	135	436	417	422	497	407	14	14	24	12	12	13

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	4.9	25.7	170.9	.199	.294	.304	.233	.015
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	2.5	18.4	128.6	.193	.341	.257	.066	(S)
1522	Other residential buildings -----	2.8	19.7	186.5	.142	.222	.412	.140	.019
1531	Operative builders -----	2.3	22.4	338.0	.102	.391	.315	*.004	.002
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	14.7	39.7	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c. -----	14.5	26.0	347.0	.111	.211	.473	.037	.006
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	28.7	32.8	161.9	.260	(D)	.171	.132	.047
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	34.3	(D)	228.0	(D)	(D)	.253	.199	.047
1623	Water, sewer, and utility lines -----	17.5	30.0	153.3	.245	.257	.134	.140	.023
1629	Heavy construction, n.e.c. -----	5.7	25.7	(D)	(D)	(D)	(D)	(D)	(D)
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	4.9	28.9	145.7	.276	.377	.107	.394	.011
1721	Painting and paper hanging -----	2.9	17.1	58.0	.359	.209	.094	.400	.012
1731	Electrical work -----	4.1	28.0	115.3	.332	.433	.025	.434	.008
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1742	Plastering, drywall, and insulation work -----	5.9	24.6	84.0	.347	.287	.062	.793	.007
1743	Terrazzo, tile, marble, and mosaic work -----	2.2	17.2	92.0	.225	.436	(S)	.399	.005
175	Carpentry and floor work:								
1751	Carpentry -----	2.5	18.8	86.2	.254	.386	.121	.435	.012
1752	Floor laying and other floor work -----	2.7	24.9	144.4	.212	.375	.062	.508	.010
1761	Roofing, siding, and sheet metal work -----	6.2	20.6	90.5	.298	.349	.045	.501	.014
1771	Concrete work -----	4.1	22.1	91.4	.303	(D)	.133	.482	.036
1781	Water well drilling -----	3.6	24.6	157.7	.236	.315	.005	.264	.003
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	14.3	46.3	182.5	.328	(D)	(D)	(D)	(D)
1793	Glass and glazing work -----	5.8	42.2	314.8	.190	.385	(D)	.830	.009
1794	Excavation work -----	3.1	20.3	100.3	.266	.281	.067	.412	.027
1795	Wrecking and demolition work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	8.6	34.0	104.4	.449	.133	.009	.158	.007
1799	Special trade contractors, n.e.c. -----	4.1	23.0	106.1	.276	.367	.058	.347	.015

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PROVIDENCE-FALL RIVER-WARWICK, RI-MA MSA											
15,16, 17	Construction industries -----	3 085	15 423	395 978	1 984 282	1 394 678	850 380	588 115	589 604	21 873	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	544	1 420	26 022	138 125	104 016	57 681	47 680	34 109	(S)	7	8
1522	Other residential buildings -----	52	(D)	2 723	19 114	11 303	8 167	4 247	*7 811	*335	(D)	25
1531	Operative builders -----	76	188	4 718	56 780	38 979	18 887	20 892	17 802	103	15	11
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	(S)	429	16 497	(D)	(D)	24 208	(D)	(D)	640	5	(D)
1542	Nonresidential buildings, n.e.c. -----	140	2 106	55 138	484 706	248 877	155 299	101 685	235 829	1 269	3	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	35	927	30 210	127 377	105 937	71 876	49 410	21 440	3 777	6	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	35	517	16 237	65 157	56 519	39 763	17 031	8 638	1 336	5	19
1629	Heavy construction, n.e.c. -----	73	378	10 137	42 161	35 889	24 113	12 553	6 272	3 257	7	6
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning -----	352	1 729	50 446	183 830	162 962	95 847	67 832	20 867	(S)	4	5
1721	Painting and paper hanging -----	169	513	8 460	24 445	22 283	17 020	5 273	2 163	*457	10	7
1731	Electrical work -----	368	1 650	44 128	131 524	128 313	74 737	55 818	3 212	1 784	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work -----	114	(S)	(S)	(S)	(S)	(S)	(S)	(S)	383	(S)	(S)
1742	Plastering, drywall, and insulation work -----	119	715	18 283	54 538	51 387	34 828	16 690	3 151	431	9	6
1743	Terrazzo, tile, marble, and mosaic work -----	(S)	87	1 494	6 626	6 341	3 552	2 891	(S)	15	19	17
175	Carpentry and floor work:											
1751	Carpentry -----	281	702	13 203	48 799	42 486	24 683	18 608	6 313	629	11	9
1752	Floor laying and other floor work -----	50	141	3 441	16 824	15 373	8 787	6 911	1 451	(D)	3	2
1761	Roofing, siding, and sheet metal work -----	120	779	16 968	59 915	56 335	33 076	23 277	3 580	566	7	7
1771	Concrete work -----	135	629	13 182	45 149	39 438	24 626	16 740	5 710	1 177	8	8
1781	Water well drilling -----	12	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	16	(D)	(D)	(D)	(D)	(D)	7 097	(D)	(D)	(D)	(D)
1793	Glass and glazing work -----	23	154	6 255	(D)	(D)	10 498	13 114	(D)	(D)	8	(D)
1794	Excavation work -----	109	341	7 054	25 735	24 407	18 370	7 377	1 328	1 005	8	9
1795	Wrecking and demolition work -----	12	(D)	(D)	(D)	(D)	4 329	(D)	309	133	(D)	(D)
1796	Installing building equipment, n.e.c. -	20	171	5 013	12 006	11 866	10 083	1 840	140	(D)	2	1
1799	Special trade contractors, n.e.c. -----	152	587	13 581	51 733	48 436	29 568	19 391	3 297	574	12	14

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-- Not applicable for this report.

Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Vermont. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 8,963 establishments in this State operating in the construction industries. These establishments accounted for \$1.4 billion in total dollar value of business done.

Most of the 8,963 construction establishments were small. Of the total, 6,419 were nonemployers, and over half of the employer establishments had less than 5 employees. The 615 construction establishments with 5 employees or more, while representing only 7 percent of all establishments, accounted for more than 68 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$1.22 billion in total dollar value of business done. Of this amount, \$1.20 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$334 million, leaving net value of construction work of \$863 million. In addition, these establishments paid out \$434 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$496 million. (See Introduction and appendixes for explanation of terms.)

There were 2,544 establishments with total employment averaging 11,878 during the year. Total payroll for 1992 was \$241 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 6,419 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$164 million. Most of these establishments, about 81 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

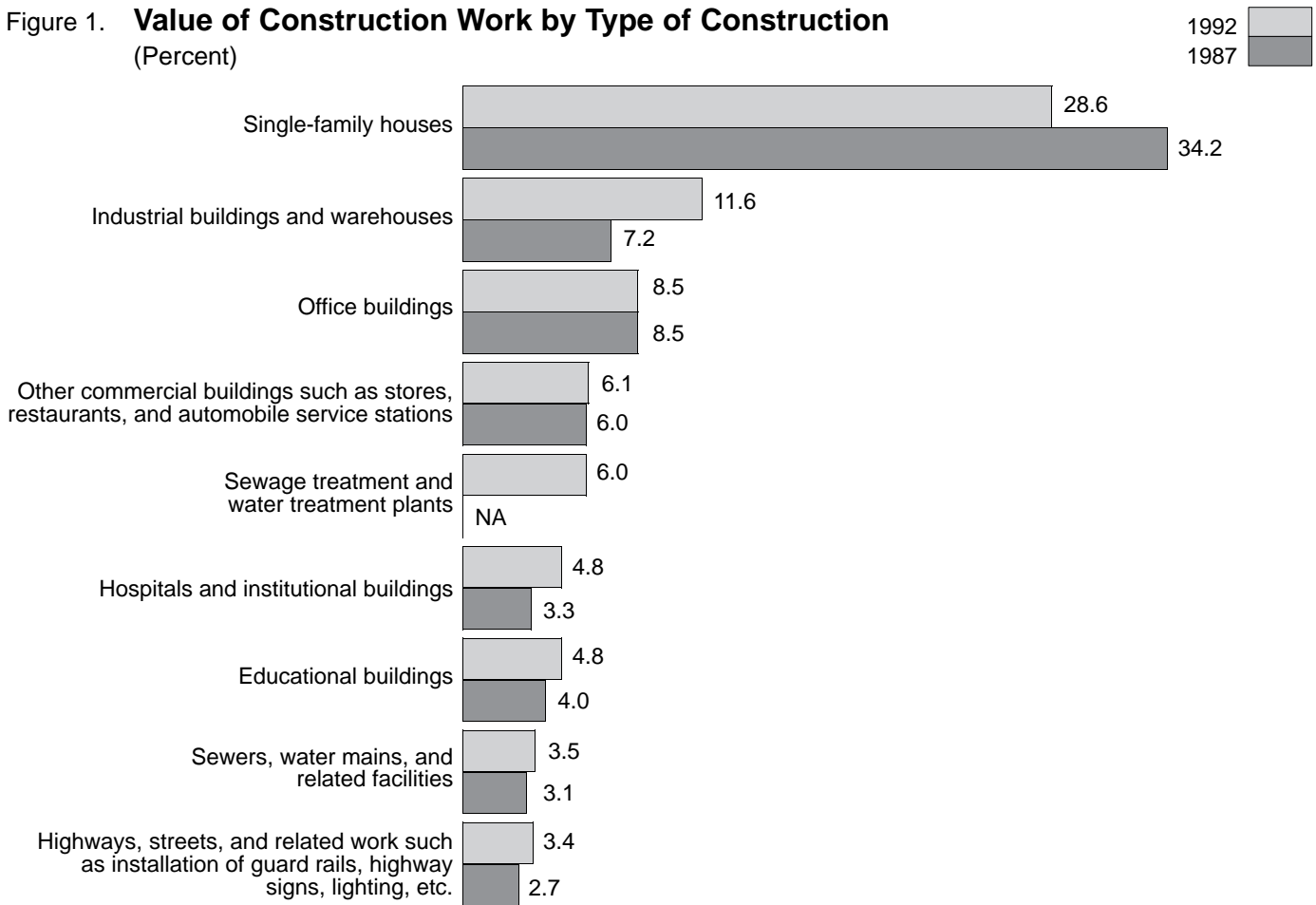


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

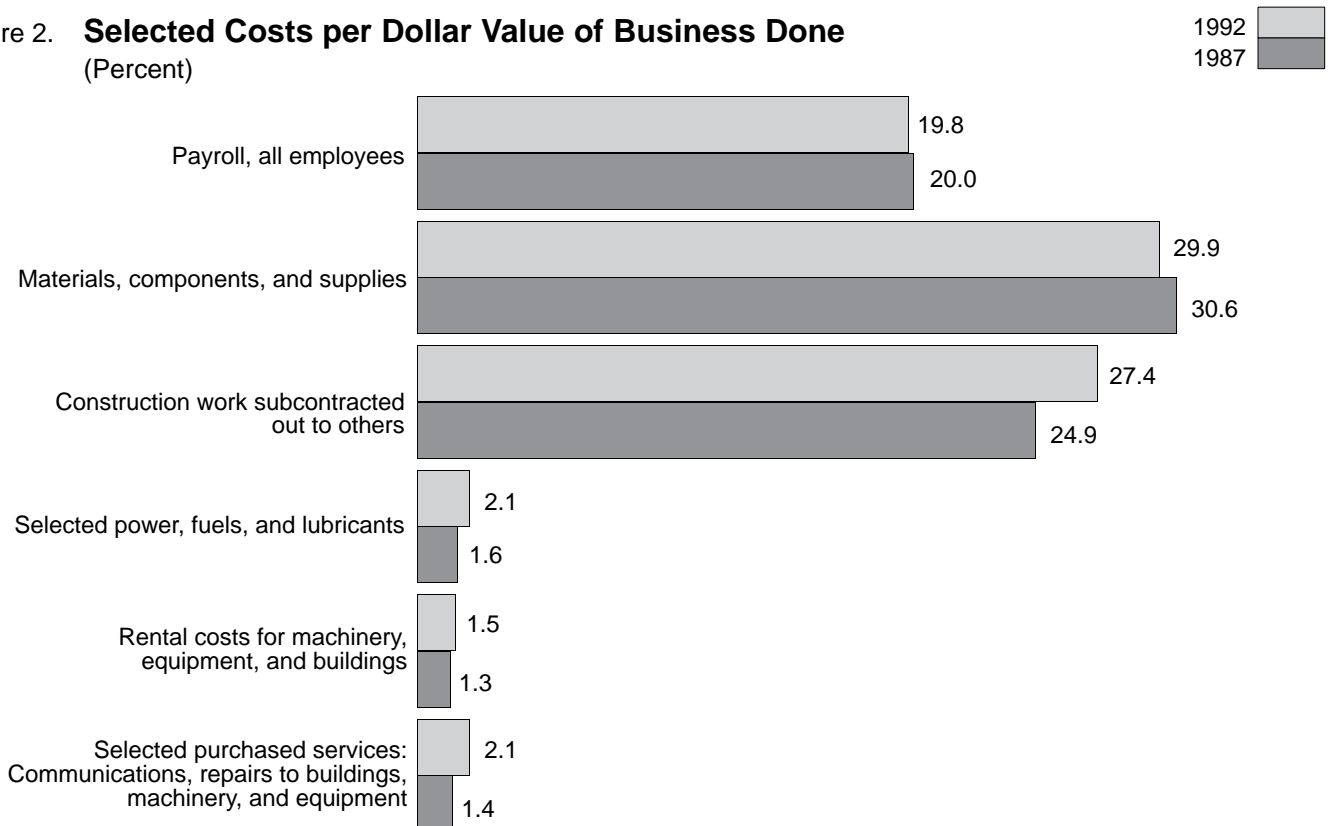


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done	Number	Proprie- tors and working partners	Dollar value of business done¹	Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	8 963	7 649	11 878	1 383 462	6 419	6 324	163 646	2 544	1 325	11 878	1 219 816	2	2
15	Building construction—General contractors and operative builders ----	2 089	1 494	5 009	742 758	1 126	1 052	50 727	963	442	5 009	692 031	4	3
16	Heavy construction other than building construction— contractors-----	213	152	1 336	131 699	89	82	2 624	124	70	1 336	129 075	6	6
17	Special trade contractors -----	6 661	6 004	5 534	509 004	5 204	5 190	110 295	1 457	814	5 534	398 709	3	4
1711	Plumbing, heating, and air-conditioning --	641	515	1 059	105 173	380	377	13 780	261	138	1 059	91 393	8	8
1731	Electrical work-----	592	465	879	68 746	390	380	10 087	202	(S)	879	58 659	6	5
	1987													
15, 16, 17	Construction industries² -----	8 678	6 737	16 630	1 813 246	6 039	5 935	278 253	2 639	802	16 630	1 534 993	2	4
15	Building construction—General contractors and operative builders ----	2 254	1 478	7 059	941 065	1 252	1 182	87 313	1 002	296	7 059	853 752	3	6
16	Heavy construction other than building construction— contractors-----	215	94	1 477	129 474	76	70	3 860	139	24	1 477	125 614	6	4
17	Special trade contractors -----	6 002	5 033	7 768	664 819	4 543	4 553	134 340	1 459	480	7 768	530 479	3	4
1711	Plumbing, heating, and air-conditioning --	653	424	1 710	154 867	337	339	19 242	316	85	1 710	135 625	6	7
1731	Electrical work-----	534	345	1 056	79 310	332	328	12 722	202	17	1 056	66 588	7	8

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	2 544	11 878	9 186	241 116	175 366	1 196 993	863 228	495 560
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	759	2 712	2 063	41 357	33 058	218 104	165 727	88 940
1522	Other residential buildings -----	*11	*22	*21	*463	*449	*1 499	*1 384	(D)
1531	Operative builders -----	60	164	71	3 408	1 259	39 561	30 754	11 969
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	11	324	229	9 375	6 920	(D)	(D)	13 359
1542	Nonresidential buildings, n.e.c. -----	122	1 787	1 290	47 311	28 306	361 812	165 632	86 344
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	23	270	217	7 331	4 822	31 364	27 268	11 738
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	13	252	216	5 681	4 129	23 084	17 797	10 990
1623	Water, sewer, and utility lines -----	27	278	241	6 922	5 428	24 649	20 280	14 022
1629	Heavy construction, n.e.c. -----	62	535	428	10 726	8 224	44 941	(D)	26 837
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	261	1 059	769	23 538	17 024	89 977	81 576	47 417
1721	Painting and paper hanging -----	139	421	362	6 335	5 507	16 224	15 719	11 533
1731	Electrical work -----	202	879	678	19 459	14 067	56 917	55 380	33 964
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	95	296	261	5 920	5 042	17 465	17 050	11 708
1742	Plastering, drywall, and insulation work -----	24	167	137	3 772	2 903	10 701	9 600	5 626
1743	Terrazzo, tile, marble, and mosaic work -----	*8	(D)	(D)	79	79	(D)	(D)	327
175	Carpentry and floor work:								
1751	Carpentry -----	197	455	378	5 687	4 996	30 661	27 607	16 684
1752	Floor laying and other floor work -----	34	81	65	1 159	865	5 125	4 750	2 415
1761	Roofing, siding, and sheet metal work -----	68	302	243	(D)	(D)	(D)	(D)	(D)
1771	Concrete work -----	131	413	349	7 985	6 485	27 793	26 920	15 877
1781	Water well drilling -----	27	242	*213	4 058	3 462	19 461	19 267	11 812
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	5	58	45	1 932	1 307	5 677	5 455	4 383
1793	Glass and glazing work -----	*15	*64	*50	*1 299	*875	*4 643	(D)	(D)
1794	Excavation work -----	194	718	583	13 781	11 496	50 871	49 145	38 127
1795	Wrecking and demolition work -----	(S)	(D)	(D)	(S)	(S)	(S)	(S)	(S)
1796	Installing building equipment, n.e.c. -----	3	27	20	1 003	(D)	(D)	3 589	2 068
1799	Special trade contractors, n.e.c. -----	46	(D)	217	(D)	3 999	20 174	(D)	13 518

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
390 491	333 765	192 294	18 173	19 644	236 679	16 630	1 479 576	634 232	2	2	13	15, 16, 17
												15
79 436 (D)	52 377 (S)	(S) —	1 521 (S)	2 410 *102	21 540 (S)	3 804 409	319 208 45 988	120 967 13 201	8 50	8 62	26 67	152 1521 1522
20 493	8 806	(S)	(S)	*397	3 971	336	(D)	(D)	16	27	60	1531
16 124 80 683	(D) 196 180	(S) 1 787	759 3 761	(D) 2 018	4 286 23 041	278 2 232	40 920 306 608	10 680 77 046	6 5	(D) 4	(D) 8	154 1541 1542
												16
16 932	4 097	11 508	467	1 404	27 745	308	32 411	17 772	9	12	14	1611
7 748 6 391 (D)	5 287 4 369 (D)	3 518 4 214 4 328	148 867 *3 274	704 877 3 114	11 069 16 464 24 676	305 379 485	30 722 27 121 31 185	16 245 17 261 21 519	17 8 12	12 7 (D)	(Z) 25 39	162 1622 1623 1629
												17
35 575	8 401	47 553	1 629	716	10 276	1 710	129 280	67 175	8	7	21	1711
4 185	506	9 239	231	*207	1 588	622	18 538	13 543	13	12	55	1721
23 158	1 537	15 533	609	598	6 526	1 056	65 946	36 384	6	5	33	1731
5 342 4 553 262	415 1 101 91	11 915 8 422 511	111 177 24	160 124 *6	3 723 1 015 47	431 459 (D)	22 601 24 408 (D)	13 982 14 422 (D)	13 19 (D)	13 19 (D)	35 10 58	174 1741 1742 1743
11 234 (S)	3 053 (S)	5 330 1 947	(S) (S)	370 (S)	5 603 *1 012	766 (D)	52 509 2 805	20 530 1 440	14 18	16 12	26 (S)	175 1751 1752
11 649	(D)	(D)	195	293	6 479	638	40 984	23 210	10	(D)	33	1761
12 442	873	15 444	830	887	8 486	479	33 392	16 126	12	13	31	1771
7 455	194	225	*454	204	8 159	57	6 210	4 526	38	38	23	1781
1 072 *2 975 14 915 (S) (D) (D)	222 (D) 1 727 (D) (D)	5 677 (D) 9 399 (D) *8 790	186 80 1 226 (D) (D)	160 (D) *4 251 (D) *102	1 170 289 47 506 (D) (D)	126 99 870 *68 333	9 174 14 592 67 003 6 440 21 464	6 579 5 638 47 338 4 013 12 552	(Z) 42 (D) 14 (D)	(Z) (D) 15 (S) (Z) (D)	(Z) (D) 55 — (D) 46	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	2 544	2 639	1 783	1 738	1	2	4	6
Proprietors and working partners.....	1 325	802	812	1 217	4	8	7	9
All employees**	11 878	16 630	9 795	8 628	2	2	3	4
Construction workers:								
March.....	7 090	10 967	5 823	5 216	3	2	3	4
May	9 164	12 953	7 810	7 959	2	2	4	4
August	10 907	14 640	9 369	8 652	2	2	3	4
November.....	9 585	12 877	8 527	7 875	2	2	3	4
Average.....	9 186	12 859	8 082	7 432	2	2	3	4
Other employees:								
March.....	2 604	3 566	1 705	1 083	3	2	5	6
May	2 633	3 727	(NA)	(NA)	3	2	(NA)	(NA)
August	2 730	3 952	(NA)	(NA)	3	2	(NA)	(NA)
November.....	2 800	3 839	(NA)	(NA)	4	2	(NA)	(NA)
Average.....	2 692	3 771	(NA)	(NA)	3	2	(NA)	(NA)
Payroll, all employees	241 116	306 737	133 909	79 474	2	2	2	3
Payroll, construction workers	175 366	223 511	102 619	65 578	2	2	3	3
Payroll, other employees	65 749	83 225	31 290	13 897	2	3	3	4
First quarter payroll, all employees	48 157	65 407	26 038	13 856	3	2	3	3
Fringe benefits, all employees	50 678	60 156	25 595	12 462	2	4	3	3
Legally required expenditures.....	36 756	44 858	18 057	9 127	2	4	4	3
Voluntary expenditures.....	13 923	15 297	7 538	3 335	3	3	4	4
Dollar value of business done	1 219 816	1 534 993	642 690	346 649	2	4	3	3
Value of construction work	1 196 993	1 479 576	622 437	333 568	2	3	3	3
Value of construction work subcontracted in from others	192 294	238 492	93 629	58 649	6	6	6	7
Other business receipts	22 823	31 700	(D)	13 081	8	7	(D)	7
Net value of construction†	863 228	1 097 584	475 271	272 120	2	2	3	3
Value added††	495 560	634 232	266 317	147 521	2	3	3	3
Selected costs.....	724 256	877 044	373 167	195 754	2	5	3	3
Materials, components, and supplies	365 012	470 304	211 149	126 593	3	3	3	4
Construction work subcontracted out to others	333 765	381 992	147 165	61 449	2	9	3	3
Selected power, fuels, and lubricants	25 479	24 748	14 852	7 712	5	5	6	5
Electricity.....	3 783	3 170	2 038	845	9	4	7	8
Natural gas	1 312	337	271	144	6	10	12	32
Gasoline and diesel fuel	18 590	19 641	11 518	5 879	4	7	6	5
On highway use.....	13 829	15 402	(NA)	(NA)	5	8	(NA)	(NA)
Off highway use.....	4 762	4 239	(NA)	(NA)	7	5	(NA)	(NA)
Other, including lubricating oils and greases.....	1 794	1 599	1 024	845	9	4	10	10
Rental cost for machinery, equipment, and buildings	18 173	19 844	9 926	5 903	10	4	6	2
For machinery and equipment	11 673	13 849	7 827	4 999	14	4	7	2
For buildings.....	6 500	5 995	2 098	904	10	6	8	7
Selected purchased services	25 078	21 506	12 044	7 979	7	4	5	4
Communication services	6 951	5 839	3 375	2 302	7	4	5	4
Repairs to buildings and other structures	838	1 731	503	534	11	9	11	12
Repairs to machinery and equipment	17 289	13 935	8 164	5 143	8	5	7	5
Ownership of construction projects:								
Value of construction work	1 196 993	1 479 576	622 437	333 568	2	3	3	3
Government owned	293 362	233 559	133 845	76 708	4	4	11	3
Federal	76 866	40 830	(NA)	(NA)	3	7	(NA)	(NA)
State and local	216 497	192 729	(NA)	(NA)	5	4	(NA)	(NA)
Privately owned	903 631	1 246 016	488 591	256 861	4	6	4	4

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	232 852	192 345	5	5
Capital expenditures, other than land -----	19 644	31 236	13	10
New -----	13 947	25 914	17	11
Used -----	5 697	5 322	18	12
Retirements and disposition of depreciable assets -----	15 818	15 151	21	25
End-of-year gross book value of depreciable assets -----	236 679	208 431	6	5
Depreciation charges during year -----	25 765	28 183	8	7
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	35 427	32 523	11	7
Capital expenditures, other than land -----	815	4 691	23	20
New buildings and other structures -----	439	3 497	9	25
Used buildings and other structures -----	* 376	1 193	48	26
Retirements and disposition of depreciable assets -----	(S)	320	(S)	8
End-of-year gross book value of depreciable assets -----	34 491	36 895	11	7
Depreciation charges during year -----	(S)	2 508	(S)	11
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	197 425	159 821	5	6
Capital expenditures, other than land -----	18 830	26 545	14	11
New machinery and equipment, including automobiles and trucks -----	13 508	22 416	18	13
New automobiles and trucks, intended primarily for highway use -----	5 672	12 062	16	19
Used machinery and equipment, including automobiles and trucks -----	5 322	4 128	19	12
Retirements and disposition of depreciable assets -----	14 067	14 831	22	25
End-of-year gross book value of depreciable assets -----	202 188	171 535	6	6
Depreciation charges during year -----	22 408	25 675	7	7

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	2 544	1
Value of construction work	1 196 993	2
Establishments with inventories:		
Number	805	5
Value of construction work	728 211	3
Inventories ¹ :		
End of 1992, materials and supplies	13 676	12
End of 1991, materials and supplies	13 712	13
Establishments with no inventories:		
Number	1 028	5
Value of construction work	322 248	4
Establishments not reporting:		
Number	712	5
Value of construction work	146 534	5

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	2 544	1 930	374	153	72	13	2	—	1	—	
All employees** -----	11 878	3 399	2 433	1 998	2 002	809	1 237	—	(D)	—	
Payroll, all employees -----	241 116	49 942	46 278	40 540	47 157	57 199	(D)	—	(D)	—	
Dollar value of business done -----	1 219 816	274 725	209 979	157 099	188 736	88 456	300 822	—	(D)	—	
Value of construction work -----	1 196 993	268 495	206 696	151 683	182 923	86 744	300 452	—	(D)	—	
Net value of construction work† -----	863 228	232 135	175 462	126 196	140 938	188 497	(D)	—	(D)	—	
Value added†† -----	495 560	128 620	112 554	78 856	80 371	95 159	(D)	—	(D)	—	
Cost of materials, components, supplies, and fuels -----	390 491	109 745	66 192	52 755	66 379	95 420	(D)	—	(D)	—	
Cost of construction work subcontracted out to others -----	333 765	36 360	31 233	25 488	41 985	198 699	(D)	—	(D)	—	
Rental cost for machinery, equipment, and buildings -----	18 173	4 387	4 006	1 885	2 966	4 928	(D)	—	(D)	—	
Capital expenditures, other than land -----	19 644	4 769	* 5 450	2 877	2 474	4 075	(D)	—	(D)	—	
End-of-year gross book value of depreciable assets -----	236 679	44 377	67 135	34 286	40 139	50 742	(D)	—	(D)	—	
1987											
All employees** -----	16 630	(S)	3 548	2 661	3 403	1 272	2 416	—	—	(D)	
Value of construction work -----	1 479 576	(S)	220 764	212 443	325 332	419 639	(D)	—	—	(D)	
Value added†† -----	634 232	(S)	116 805	89 236	150 943	132 333	(D)	—	—	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	6	10	9	9	(Z)	(Z)	—	(D)	—	
Net value of construction work† -----	2	7	10	9	8	(Z)	(D)	—	(D)	—	
Capital expenditures, other than land -----	13	24	41	25	13	(Z)	(D)	—	(D)	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	2 544	(S)	(S)	566	726	457	201	164	28	14	5
All employees** -----	11 878	(S)	(S)	791	1 807	1 883	1 850	2 301	881	743	1 362
Payroll, all employees -----	241 116	(S)	(S)	8 727	26 587	32 454	37 500	52 171	23 242	19 062	39 256
Dollar value of business done -----	1 219 816	(S)	(S)	40 954	111 246	156 151	140 571	242 751	98 028	92 203	327 882
Value of construction work -----	1 196 993	(S)	(S)	40 293	108 757	151 688	138 022	235 463	94 296	91 155	327 512
Net value of construction work† -----	863 228	(S)	(S)	38 112	98 188	128 420	121 147	191 199	76 214	67 916	132 893
Value added†† -----	495 560	(S)	(S)	22 980	63 277	68 625	77 924	114 669	44 990	36 625	61 211
Cost of materials, components, supplies, and fuels -----	390 491	(S)	(S)	15 794	37 400	64 258	45 771	83 818	34 957	32 339	72 052
Cost of construction work subcontracted out to others -----	333 765	(S)	(S)	(S)	10 569	23 268	16 876	44 264	18 082	23 239	194 619
Rental cost for machinery, equipment, and buildings -----	18 173	(S)	(S)	861	(S)	1 764	2 050	5 151	(S)	5 182	(D)
Capital expenditures, other than land -----	19 644	(S)	(S)	434	2 000	*5 938	1 934	3 923	1 372	3 856	(D)
End-of-year gross book value of depreciable assets -----	236 679	(S)	(S)	12 564	17 246	36 880	41 234	50 525	32 110	24 204	20 136
1987											
All employees** -----	16 630	(S)	(S)	(S)	2 865	2 254	2 388	2 504	1 915	1 389	2 338
Value of construction work -----	1 479 576	(S)	(S)	(S)	144 459	152 630	164 253	210 436	201 561	166 311	398 827
Value added†† -----	634 232	(S)	(S)	(S)	82 111	78 456	88 259	102 259	98 601	66 131	94 888
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	(S)	(S)	11	9	11	10	10	2	(Z)	(Z)
Net value of construction work† -----	2	(S)	(S)	10	9	11	12	9	8	(Z)	(Z)
Capital expenditures, other than land -----	13	(S)	(S)	28	28	41	21	19	1	(Z)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 196 993	653 712	336 462	114 725	2	3	3	5
Building construction	867 352	526 095	253 575	87 682	2	3	4	6
Single-family houses	342 757	208 710	90 424	43 624	5	6	7	10
Single-family houses, detached	310 218	184 995	84 551	40 671	5	7	7	11
Single-family houses, attached, including townhouses and townhouse-type condominiums	32 539	23 714	5 873	2 952	14	15	25	20
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	24 916	10 249	10 757	3 910	10	14	14	20
Other residential buildings, including hotels, motels, and tourist cabins	15 510	9 794	3 868	1 847	10	7	30	22
Office buildings	101 699	75 632	20 789	5 279	4	3	14	18
Other commercial buildings such as stores, restaurants, and automobile service stations	72 891	38 331	25 728	8 832	9	12	15	10
Industrial buildings and warehouses	139 038	82 148	45 503	11 387	3	3	5	5
Industrial buildings	109 674	58 901	40 707	10 066	4	4	6	6
Warehouses	29 364	23 247	4 796	1 322	4	4	8	16
Educational buildings	57 641	34 024	18 546	5 070	9	10	9	20
Hospitals and institutional buildings	58 031	37 700	16 992	3 339	3	1	7	16
Farm buildings, nonresidential	8 357	4 973	1 917	1 467	19	28	22	19
Amusement, social, and recreational buildings, indoors	8 287	6 623	593	1 072	6	6	12	24
Other nonresidential buildings	38 226	17 913	18 459	1 854	7	8	6	19
Nonbuilding construction	237 548	127 617	82 887	27 044	3	4	5	11
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	41 018	22 929	9 964	8 125	9	12	6	26
Private driveways and parking areas	7 460	5 293	(D)	(D)	25	30	(D)	(D)
Recreational facilities	6 549	4 552	564	*1 433	29	29	38	45
Bridges, tunnels, and elevated highways	23 263	7 341	14 033	1 889	9	20	11	12
Power and communication transmission lines, towers, and related facilities	8 001	5 112	(S)	*1 873	25	26	(S)	63
Sewers, water mains, and related facilities	42 158	21 892	13 553	6 714	11	12	14	23
Sewers, sewer lines, septic systems, and related facilities	27 304	10 516	11 705	5 084	14	16	15	28
Water mains and related facilities	14 854	11 376	1 848	1 630	10	10	13	12
Power plants	18 067	(S)	(D)	(D)	6	(S)	(D)	(D)
Other nonbuilding construction	91 031	58 934	30 246	(S)	5	5	9	(S)
Construction work, n.s.k.	92 093	(NA)	(NA)	(NA)	16	(NA)	(NA)	(NA)
1987								
Value of construction work	1 479 576	998 648	279 516	105 240	3	5	3	5
Building construction	1 130 491	798 618	243 632	75 420	4	6	4	6
Single-family houses	505 997	379 370	85 777	40 848	5	7	7	8
Single-family houses, detached	358 755	244 214	78 248	36 293	5	7	7	8
Single-family houses, attached, including townhouses and townhouse-type condominiums	147 241	135 156	7 529	4 555	12	13	10	18
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	*93 713	*82 329	5 529	5 854	44	50	17	17
Other residential buildings, including hotels, motels, and tourist cabins	73 188	54 997	13 609	4 581	10	12	18	23
Office buildings	125 331	88 789	32 451	4 091	4	3	11	12
Other commercial buildings such as stores, restaurants, and automobile service stations	89 361	51 665	29 336	8 359	6	7	7	10
Industrial buildings and warehouses	107 193	77 684	21 743	7 765	4	4	5	9
Industrial buildings	75 998	51 979	17 653	6 365	4	5	5	10
Warehouses	31 194	25 704	4 090	1 399	5	6	5	7
Educational buildings	59 414	34 307	22 556	2 550	6	6	13	14
Hospitals and institutional buildings	48 550	22 644	24 811	1 094	6	8	8	19
Other nonresidential buildings	27 744	15 997	8 148	3 608	19	30	17	12
Nonbuilding construction	252 915	190 866	35 556	26 492	3	3	6	8
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	39 964	23 704	12 241	4 018	6	6	6	19
Sewers, water mains, and related facilities	45 837	35 280	5 738	4 818	6	4	14	13
Sewers, sewer lines, septic systems, and related facilities	33 013	24 738	4 941	3 333	6	5	15	10
Water mains and related facilities	12 823	10 541	(D)	(D)	8	6	(D)	(D)
Power plants	22 380	19 418	(D)	(D)	3	4	(D)	(D)
Other nonbuilding construction	144 734	112 464	16 459	15 813	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	96 169	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	2 544	9 186	7 090	9 164	10 907	9 585	1	2	3	2	2	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	759	2 063	1 675	2 091	2 436	2 051	5	8	9	8	7	7
1522	Other residential buildings -----	*11	*21	(S)	(S)	*32	*31	69	53	(S)	(S)	52	54
1531	Operative builders -----	60	71	61	79	84	59	25	22	21	21	24	22
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	11	229	238	228	204	246	26	5	5	5	6	5
1542	Nonresidential buildings, n.e.c. -----	122	1 290	1 132	1 205	1 411	1 412	18	6	5	5	6	7
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	23	217	82	216	295	277	35	7	10	7	7	8
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	13	216	88	220	300	255	26	17	21	18	15	16
1623	Water, sewer, and utility lines -----	27	241	86	238	317	323	24	9	4	6	12	11
1629	Heavy construction, n.e.c. -----	62	428	259	442	550	459	22	14	21	16	13	14
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	261	769	720	816	791	747	4	8	8	8	8	9
1721	Painting and paper hanging -----	139	362	214	383	533	317	7	13	17	15	12	13
1731	Electrical work -----	202	678	685	619	726	681	2	6	6	6	6	7
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	95	261	167	285	316	277	11	13	17	20	13	18
1742	Plastering, drywall, and insulation work -----	24	137	112	101	173	162	37	18	20	21	19	19
1743	Terrazzo, tile, marble, and mosaic work -----	*8	(D)	(D)	(D)	8	(D)	43	(D)	(D)	(D)	(Z)	(D)
175	Carpentry and floor work:												
1751	Carpentry -----	197	378	275	349	421	467	9	14	12	12	13	16
1752	Floor laying and other floor work -----	34	65	69	68	64	59	22	23	33	22	24	25
1761	Roofing, siding, and sheet metal work -----	68	243	(D)	244	(D)	240	16	12	(D)	14	(D)	12
1771	Concrete work -----	131	349	201	396	465	334	12	13	14	14	12	17
1781	Water well drilling -----	27	*213	*196	*211	*226	221	31	41	43	43	40	38
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	5	45	45	35	47	54	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1793	Glass and glazing work -----	*15	*50	*43	*41	*62	*54	53	45	47	49	43	42
1794	Excavation work -----	194	583	362	581	778	612	10	14	17	16	14	16
1795	Wrecking and demolition work -----	(S)	(D)	(S)	(D)	(S)	(D)	(S)	(D)	(S)	(D)	(S)	(D)
1796	Installing building equipment, n.e.c. -----	3	20	(D)	22	(D)	(D)	(Z)	(Z)	(D)	(Z)	(D)	(D)
1799	Special trade contractors, n.e.c. -----	46	217	152	235	277	204	27	19	19	20	21	21

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	4.7	20.3	130.3	.201	.326	.279	.161	.015
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.6	15.3	105.7	.190	.364	.240	(S)	.007
1522	Other residential buildings -----	*2.0	21.0	71.4	.309	(D)	.077	—	.064
1531	Operative builders -----	2.7	20.8	557.2	.086	.518	.223	(S)	*.017
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	30.1	28.9	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c. -----	14.6	26.5	280.5	.131	.223	.542	.005	.010
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	11.7	27.2	144.5	.234	.540	.131	.367	.015
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	19.8	22.5	106.9	.246	.336	.229	.152	.006
1623	Water, sewer, and utility lines -----	10.4	24.9	102.3	.281	.259	.177	.171	.035
1629	Heavy construction, n.e.c. -----	8.7	20.0	105.0	.239	(D)	(D)	.096	*.073
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	4.1	22.2	117.0	.262	.395	.093	.529	.018
1721	Painting and paper hanging -----	3.0	15.0	44.8	.390	.258	.031	.569	.014
1731	Electrical work -----	4.4	22.1	83.9	.342	.407	.027	.273	.011
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	3.1	20.0	66.9	.339	.306	.024	.682	.006
1742	Plastering, drywall, and insulation work -----	6.9	22.6	78.1	.352	.425	.103	.787	.017
1743	Terrazzo, tile, marble, and mosaic work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:								
1751	Carpentry -----	2.3	12.5	81.1	.185	.366	.100	.174	(S)
1752	Floor laying and other floor work -----	2.4	14.3	78.8	.226	(S)	(S)	.380	(S)
1761	Roofing, siding, and sheet metal work -----	4.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1771	Concrete work -----	3.1	19.3	79.6	.287	.448	.031	.556	.030
1781	Water well drilling -----	8.9	16.8	91.4	.209	.383	*.010	*.012	.023
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	11.6	33.3	126.2	.340	.189	.039	—	.033
1793	Glass and glazing work -----	4.2	20.3	92.9	.280	.641	(D)	(D)	*.017
1794	Excavation work -----	3.7	19.2	87.3	.271	.293	.034	.185	.024
1795	Wrecking and demolition work -----	(D)	(D)	(D)	.078	.501	—	—	—
1796	Installing building equipment, n.e.c. -----	9.0	37.1	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c. -----	(D)	(D)	93.0	(D)	(D)	(D)	*.436	(D)

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992**

[Not applicable]

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
- **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
- **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- **Outdoor swimming pools.** Includes wading pools and reflecting pools.
- **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
- **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
- **Fencing.** Includes all types of fencing.
- **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
- **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
- **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- **Harbor and port facilities.** Includes docks, piers, and wharves.
- **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
- **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
- **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
- **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
- **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

Nonbuilding construction:

- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Appendix D. Metropolitan Areas

[Titles and definitions shown for MSA's, CMSA's, and PMSA's are those established by the Office of Management and Budget as of June 30, 1993]

Abilene, TX MSA

Taylor County, TX

Akron, OH PMSA—see Cleveland–Akron, OH CMSA

Albany, GA MSA

Dougherty County, GA
Lee County, GA

Albany–Schenectady–Troy, NY MSA

Albany County, NY
Montgomery County, NY
Rensselaer County, NY
Saratoga County, NY
Schenectady County, NY
Schoharie County, NY

Albuquerque, NM MSA

Bernalillo County, NM
Sandoval County, NM
Valencia County, NM

Alexandria, LA MSA

Rapides Parish, LA

Allentown–Bethlehem–Easton, PA MSA

Carbon County, PA
Lehigh County, PA
Northampton County, PA

Altoona, PA MSA

Blair County, PA

Amarillo, TX MSA

Potter County, TX
Randall County, TX

Anchorage, AK MSA

Anchorage Borough, AK

Ann Arbor, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Anniston, AL MSA

Calhoun County, AL

Appleton–Oshkosh–Neenah, WI MSA

Calumet County, WI
Outagamie County, WI
Winnebago County, WI

Asheville, NC MSA

Buncombe County, NC
Madison County, NC

Athens, GA MSA

Clarke County, GA
Madison County, GA
Oconee County, GA

Atlanta, GA MSA

Barrow County, GA
Bartow County, GA

Atlanta, GA MSA—Con.

Carroll County, GA
Cherokee County, GA
Clayton County, GA
Cobb County, GA
Coweta County, GA
DeKalb County, GA
Douglas County, GA
Fayette County, GA
Forsyth County, GA
Fulton County, GA
Gwinnett County, GA
Henry County, GA
Newton County, GA
Paulding County, GA
Pickens County, GA
Rockdale County, GA
Spalding County, GA
Walton County, GA

Atlantic–Cape May, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Augusta–Aiken, GA–SC MSA

Columbia County, GA
McDuffie County, GA
Richmond County, GA
Aiken County, SC
Edgefield County, SC

Austin–San Marcos, TX MSA

Bastrop County, TX
Caldwell County, TX
Hays County, TX
Travis County, TX
Williamson County, TX

Bakersfield, CA MSA

Kern County, CA

Baltimore, MD PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA

Bangor, ME MSA

Penobscot County, ME (part)
Bangor city, ME
Brewer city, ME
Eddington town, ME
Glenburn town, ME
Hampden town, ME
Hermon town, ME
Holden town, ME
Kenduskeag town, ME
Milford town, ME
Old Town city, ME
Orono town, ME
Orrington town, ME
Penobscot Indian Island Reservation, ME
Veazie town, ME

Bangor, ME MSA—Con.

Waldo County, ME (part)
Winterport town, ME

Barnstable–Yarmouth, MA MSA

Barnstable County, MA (part)
Barnstable city, MA
Brewster town, MA
Chatham town, MA
Dennis town, MA
Eastham town, MA
Harwich town, MA
Mashpee town, MA
Orleans town, MA
Sandwich town, MA
Yarmouth town, MA

Baton Rouge, LA MSA

Ascension Parish, LA
East Baton Rouge Parish, LA
Livingston Parish, LA
West Baton Rouge Parish, LA

Beaumont–Port Arthur, TX MSA

Hardin County, TX
Jefferson County, TX
Orange County, TX

Bellingham, WA MSA

Whatcom County, WA

Benton Harbor, MI MSA

Berrien County, MI

Bergen–Passaic, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Billings, MT MSA

Yellowstone County, MT

Biloxi–Gulfport–Pascagoula, MS MSA

Hancock County, MS
Harrison County, MS
Jackson County, MS

Binghamton, NY MSA

Broome County, NY
Tioga County, NY

Birmingham, AL MSA

Blount County, AL
Jefferson County, AL
St. Clair County, AL
Shelby County, AL

Bismarck, ND MSA

Burleigh County, ND
Morton County, ND

Bloomington, IN MSA

Monroe County, IN

Bloomington–Normal, IL MSA

McLean County, IL

Boise City, ID MSA

Ada County, ID

Canyon County, ID

**Boston, MA–NH PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA**

Boston, MA–NH PMSA

Bristol County, MA (part)

Berkley town, MA

Dighton town, MA

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Essex town, MA

Gloucester city, MA

Hamilton town, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Manchester town, MA

Marblehead town, MA

Middleton town, MA

Nahant town, MA

Newbury town, MA

Newburyport city, MA

Peabody city, MA

Rockport town, MA

Rowley town, MA

Salem city, MA

Salisbury town, MA

Saugus town, MA

Swampscott town, MA

Topsfield town, MA

Wenham town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Holliston town, MA

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Lincoln town, MA

Littleton town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Sherborn town, MA

Shirley town, MA

Somerville city, MA

Stoneham town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Middlesex County, MA (part)

Stow town, MA

Sudbury town, MA

Townsend town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

Winchester town, MA

Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Cohasset town, MA

Dedham town, MA

Dover town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Millis town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Plainville town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Norwell town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

Suffolk County, MA

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA

Blackstone town, MA

Bolton town, MA

Harvard town, MA

Hopedale town, MA

Lancaster town, MA

Mendon town, MA

Milford town, MA

Millville town, MA

Southborough town, MA

Upton town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Rockingham County, NH (part)

Seabrook town, NH

South Hampton town, NH

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Halifax town, MA

Hanson town, MA

Lakeville town, MA

Middleborough town, MA

Plympton town, MA

West Bridgewater town, MA

Whitman town, MA

Fitchburg–Leominster, MA PMSA

Middlesex County, MA (part)

Ashby town, MA

Worcester County, MA (part)

Ashburnham town, MA

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lunenburg town, MA

Templeton town, MA

Westminster town, MA

Winchendon town, MA

Lawrence, MA–NH PMSA

Essex County, MA (part)

Andover town, MA

Boxford town, MA

Georgetown town, MA

Groveland town, MA

Haverhill city, MA

Lawrence city, MA

Merrimac town, MA

Methuen city, MA

North Andover town, MA

West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH

Chester town, NH

Danville town, NH

Derry town, NH

Fremont town, NH

Hampstead town, NH

Kingston town, NH

Newton town, NH

Plaistow town, NH

Raymond town, NH

Salem town, NH

Sandown town, NH

Windham town, NH

Lowell, MA–NH PMSA

Middlesex County, MA (part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Dunstable town, MA

Groton town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Tyngsborough town, MA

Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Manchester, NH PMSA
 Hillsborough County, NH (part)
 Bedford town, NH
 Goffstown town, NH
 Manchester city, NH
 Weare town, NH
 Merrimack County, NH (part)
 Allentown town, NH
 Hooksett town, NH
 Rockingham County, NH (part)
 Auburn town, NH
 Candia town, NH
 Londonderry town, NH
 Nashua, NH PMSA
 Hillsborough County, NH (part)
 Amherst town, NH
 Brookline town, NH
 Greenville town, NH
 Hollis town, NH
 Hudson town, NH
 Litchfield town, NH
 Mason town, NH
 Merrimack town, NH
 Milford town, NH
 Mont Vernon town, NH
 Nashua city, NH
 New Ipswich town, NH
 Wilton town, NH
 New Bedford, MA PMSA
 Bristol County, MA (part)
 Acushnet town, MA
 Dartmouth town, MA
 Fairhaven town, MA
 Freetown town, MA
 New Bedford city, MA
 Plymouth County, MA (part)
 Marion town, MA
 Mattapoisett town, MA
 Rochester town, MA
 Portsmouth–Rochester, NH–ME PMSA
 York County, ME (part)
 Berwick town, ME
 Eliot town, ME
 Kittery town, ME
 South Berwick town, ME
 York town, ME
 Rockingham County, NH (part)
 Brentwood town, NH
 East Kingston town, NH
 Epping town, NH
 Exeter town, NH
 Greenland town, NH
 Hampton town, NH
 Hampton Falls town, NH
 Kensington town, NH
 New Castle town, NH
 Newfields town, NH
 Newington town, NH
 Newmarket town, NH
 North Hampton town, NH
 Portsmouth city, NH
 Rye town, NH
 Stratham town, NH
 Strafford County, NH (part)
 Barrington town, NH
 Dover city, NH
 Durham town, NH
 Farmington town, NH
 Lee town, NH
 Madbury town, NH
 Milton town, NH
 Rochester city, NH
 Rollinsford town, NH
 Somersworth city, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Worcester, MA–CT PMSA
 Windham County, CT (part)
 Thompson town, CT
 Hampden County, MA (part)
 Holland town, MA
 Worcester County, MA (part)
 Auburn town, MA
 Barre town, MA
 Boylston town, MA
 Brookfield town, MA
 Charlton town, MA
 Clinton town, MA
 Douglas town, MA
 Dudley town, MA
 East Brookfield town, MA
 Grafton town, MA
 Holden town, MA
 Leicester town, MA
 Millbury town, MA
 Northborough town, MA
 Northbridge town, MA
 North Brookfield town, MA
 Oakham town, MA
 Oxford town, MA
 Paxton town, MA
 Princeton town, MA
 Rutland town, MA
 Shrewsbury town, MA
 Southbridge town, MA
 Spencer town, MA
 Sterling town, MA
 Sturbridge town, MA
 Sutton town, MA
 Uxbridge town, MA
 Webster town, MA
 Westborough town, MA
 West Boylston town, MA
 West Brookfield town, MA
 Worcester city, MA

**Boulder–Longmont, CO PMSA—see
Denver–Boulder–Greeley, CO CMSA****Brazoria, TX PMSA—see Houston–
Galveston–Brazoria, TX CMSA****Bremerton, WA PMSA—see Seattle–
Tacoma–Bremerton, WA CMSA****Bridgeport, CT PMSA—see New York–
Northern New Jersey–Long Island, NY–
NJ–CT–PA CMSA****Brockton, MA PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Brownsville–Harlingen–San Benito, TX MSA**
Cameron County, TX**Bryan–College Station, TX MSA**
Brazos County, TX**Buffalo–Niagara Falls, NY MSA**
Erie County, NY
Niagara County, NY

Burlington, VT MSA
 Chittenden County, VT (part)
 Burlington city, VT
 Charlotte town, VT
 Colchester town, VT
 Essex Junction village, VT
 Essex town balance, VT
 Hinesburg town, VT
 Jericho town, VT
 Jericho village, VT
 Milton town, VT
 Milton village, VT
 Richmond town, VT
 St. George town, VT
 Shelburne town, VT

Burlington, VT MSA—Con.

Chittenden County, VT (part)—Con.
 South Burlington city, VT
 Williston town, VT
 Winooski city, VT
 Franklin County, VT (part)
 Fairfax town, VT
 Georgia town, VT
 St. Albans city, VT
 St. Albans town, VT
 Swanton town, VT
 Swanton village, VT
 Grand Isle County, VT (part)
 Grand Isle town, VT
 South Hero town, VT

Canton–Massillon, OH MSA

Carroll County, OH
 Stark County, OH

Casper, WY MSA

Natrona County, WY

Cedar Rapids, IA MSA

Linn County, IA

Champaign–Urbana, IL MSA

Champaign County, IL

Charleston–North Charleston, SC MSA

Berkeley County, SC
 Charleston County, SC
 Dorchester County, SC

Charleston, WV MSA

Kanawha County, WV
 Putnam County, WV

Charlotte–Gastonia–Rock Hill, NC–SC MSA

Cabarrus County, NC
 Gaston County, NC
 Lincoln County, NC
 Mecklenburg County, NC
 Rowan County, NC
 Union County, NC
 York County, SC

Charlottesville, VA MSA

Albemarle County, VA
 Fluvanna County, VA
 Greene County, VA
 Charlottesville city, VA

Chattanooga, TN–GA MSA

Catoosa County, GA
 Dade County, GA
 Walker County, GA
 Hamilton County, TN
 Marion County, TN

Cheyenne, WY MSA

Laramie County, WY

**Chicago, IL PMSA—see Chicago–Gary–
Kenosha, IL–IN–WI CMSA****Chicago–Gary–Kenosha, IL–IN–WI CMSA**

Chicago, IL PMSA
 Cook County, IL
 DeKalb County, IL
 DuPage County, IL
 Grundy County, IL
 Kane County, IL
 Kendall County, IL
 Lake County, IL
 McHenry County, IL
 Will County, IL
 Gary, IN PMSA
 Lake County, IN
 Porter County, IN
 Kankakee, IL PMSA
 Kankakee County, IL

Chicago–Gary–Kenosha, IL–IN–WI CMSA—Con.

Kenosha, WI PMSA
Kenosha County, WI

Chico–Paradise, CA MSA

Butte County, CA

Cincinnati, OH–KY–IN PMSA—see**Cincinnati–Hamilton, OH–KY–IN CMSA****Cincinnati–Hamilton, OH–KY–IN CMSA**

Cincinnati, OH–KY–IN PMSA
Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH
Hamilton–Middletown, OH PMSA
Butler County, OH

Clarksville–Hopkinsville, TN–KY MSA

Christian County, KY
Montgomery County, TN

Cleveland–Lorain–Elyria, OH PMSA—see**Cleveland–Akron, OH CMSA****Cleveland–Akron, OH CMSA**

Akron, OH PMSA
Portage County, OH
Summit County, OH
Cleveland–Lorain–Elyria, OH PMSA
Ashtabula County, OH
Cuyahoga County, OH
Geauga County, OH
Lake County, OH
Lorain County, OH
Medina County, OH

Colorado Springs, CO MSA

El Paso County, CO

Columbia, MO MSA

Boone County, MO

Columbia, SC MSA

Lexington County, SC
Richland County, SC

Columbus, GA–AL MSA

Russell County, AL
Chattahoochee County, GA
Harris County, GA
Muscookee County, GA

Columbus, OH MSA

Delaware County, OH
Fairfield County, OH
Franklin County, OH
Licking County, OH
Madison County, OH
Pickaway County, OH

Corpus Christi, TX MSA

Nueces County, TX
San Patricio County, TX

Cumberland, MD–WV MSA

Allegany County, MD
Mineral County, WV

Dallas, TX PMSA—see Dallas–Fort Worth, TX CMSA**Dallas–Fort Worth, TX CMSA**

Dallas, TX PMSA
Collin County, TX
Dallas County, TX
Denton County, TX
Ellis County, TX
Henderson County, TX
Hunt County, TX
Kaufman County, TX
Rockwall County, TX
Fort Worth–Arlington, TX PMSA
Hood County, TX
Johnson County, TX
Parker County, TX
Tarrant County, TX

Danbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Danville, VA MSA**

Pittsylvania County, VA
Danville city, VA

Davenport–Moline–Rock Island, IA–IL MSA

Henry County, IL
Rock Island County, IL
Scott County, IA

Dayton–Springfield, OH MSA

Clark County, OH
Greene County, OH
Miami County, OH
Montgomery County, OH

Daytona Beach, FL MSA

Flagler County, FL
Volusia County, FL

Decatur, AL MSA

Lawrence County, AL
Morgan County, AL

Decatur, IL MSA

Macon County, IL

Denver, CO PMSA—see Denver–Boulder–Greeley, CO CMSA**Denver–Boulder–Greeley, CO CMSA**

Boulder–Longmont, CO PMSA
Boulder County, CO
Denver, CO PMSA
Adams County, CO
Arapahoe County, CO
Denver County, CO
Douglas County, CO
Jefferson County, CO
Greeley, CO PMSA
Weld County, CO

Des Moines, IA MSA

Dallas County, IA
Polk County, IA
Warren County, IA

Detroit, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA**Detroit–Ann Arbor–Flint, MI CMSA**

Ann Arbor, MI PMSA
Lenawee County, MI
Livingston County, MI
Washtenaw County, MI
Detroit, MI PMSA
Lapeer County, MI
Macomb County, MI
Monroe County, MI
Oakland County, MI
St. Clair County, MI
Wayne County, MI

Detroit–Ann Arbor–Flint, MI CMSA—Con.

Flint, MI PMSA
Genesee County, MI

Dothan, AL MSA

Dale County, AL
Houston County, AL

Dover, DE MSA

Kent County, DE

Dubuque, IA MSA

Dubuque County, IA

Duluth–Superior, MN–WI MSA

St. Louis County, MN
Douglas County, WI

Dutchess County, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Eau Claire, WI MSA**

Chippewa County, WI
Eau Claire County, WI

El Paso, TX MSA

El Paso County, TX

Elkhart–Goshen, IN MSA

Elkhart County, IN

Elmira, NY MSA

Chemung County, NY

Enid, OK MSA

Garfield County, OK

Erie, PA MSA

Erie County, PA

Eugene–Springfield, OR MSA

Lane County, OR

Evansville–Henderson, IN–KY MSA

Posey County, IN
Vanderburgh County, IN
Warrick County, IN
Henderson County, KY

Fargo–Moorhead, ND–MN MSA

Clay County, MN
Cass County, ND

Fayetteville, NC MSA

Cumberland County, NC

Fayetteville–Springdale–Rogers, AR MSA

Benton County, AR
Washington County, AR

Fitchburg–Leominster, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Flint, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA****Florence, AL MSA**

Colbert County, AL
Lauderdale County, AL

Florence, SC MSA

Florence County, SC

Fort Collins–Loveland, CO MSA

Larimer County, CO

Fort Lauderdale, FL PMSA—see Miami–Fort Lauderdale, FL CMSA**Fort Myers–Cape Coral, FL MSA**

Lee County, FL

Fort Pierce–Port St. Lucie, FL MSA

Martin County, FL
St. Lucie County, FL

Fort Smith, AR—OK MSA
Crawford County, AR
Sebastian County, AR
Sequoyah County, OK

Fort Walton Beach, FL MSA
Okaloosa County, FL

Fort Wayne, IN MSA
Adams County, IN
Allen County, IN
De Kalb County, IN
Huntington County, IN
Wells County, IN
Whitley County, IN

**Fort Worth—Arlington, TX PMSA—see
Dallas—Fort Worth, TX CMSA**

Fresno, CA MSA
Fresno County, CA
Madera County, CA

Gadsden, AL MSA
Etowah County, AL

Gainesville, FL MSA
Alachua County, FL

**Galveston—Texas City, TX PMSA—see
Houston—Galveston—Brazoria, TX CMSA**

**Gary, IN PMSA—see Chicago—Gary—
Kenosha, IL—IN—WI CMSA**

Glens Falls, NY MSA
Warren County, NY
Washington County, NY

Goldsboro, NC MSA
Wayne County, NC

Grand Forks, ND—MN MSA
Polk County, MN
Grand Forks County, ND

Grand Rapids—Muskegon—Holland, MI MSA
Allegan County, MI
Kent County, MI
Muskegon County, MI
Ottawa County, MI

Great Falls, MT MSA
Cascade County, MT

**Greeley, CO PMSA—see Denver—Boulder—
Greeley, CO CMSA**

Green Bay, WI MSA
Brown County, WI

**Greensboro—Winston-Salem—High Point, NC
MSA**
Alamance County, NC
Davidson County, NC
Davie County, NC
Forsyth County, NC
Guilford County, NC
Randolph County, NC
Stokes County, NC
Yadkin County, NC

Greenville, NC MSA
Pitt County, NC

Greenville—Spartanburg—Anderson, SC MSA
Anderson County, SC
Cherokee County, SC
Greenville County, SC
Pickens County, SC
Spartanburg County, SC

**Hagerstown, MD PMSA—see Washington—
Baltimore, DC—MD—VA—WV CMSA**

**Hamilton—Middletown, OH PMSA—see
Cincinnati—Hamilton, OH—KY—IN CMSA**

Harrisburg—Lebanon—Carlisle, PA MSA
Cumberland County, PA
Dauphin County, PA
Lebanon County, PA
Perry County, PA

Hartford, CT MSA
Hartford County, CT (part)
Avon town, CT
Berlin town, CT
Bloomfield town, CT
Bristol city, CT
Burlington town, CT
Canton town, CT
East Granby town, CT
East Hartford town, CT
East Windsor town, CT
Enfield town, CT
Farmington town, CT
Glastonbury town, CT
Granby town, CT
Hartford city, CT
Manchester town, CT
Marlborough town, CT
New Britain city, CT
Newington town, CT
Plainville town, CT
Rocky Hill town, CT
Simsbury town, CT
Southington town, CT
South Windsor town, CT
Suffield town, CT
West Hartford town, CT
Wethersfield town, CT
Windsor town, CT
Windsor Locks town, CT

Litchfield County, CT (part)
Barkhamsted town, CT
Harwinton town, CT
New Hartford town, CT
Plymouth town, CT
Winchester town, CT

Middlesex County, CT (part)
Cromwell town, CT
Durham town, CT
East Haddam town, CT
East Hampton town, CT
Haddam town, CT
Middlefield town, CT
Middletown city, CT
Portland town, CT

New London County, CT (part)
Colchester town, CT
Lebanon town, CT

Tolland County, CT (part)
Andover town, CT
Bolton town, CT
Columbia town, CT
Coventry town, CT
Ellington town, CT
Hebron town, CT
Mansfield town, CT
Somers town, CT
Stafford town, CT
Tolland town, CT
Vernon town, CT
Willington town, CT

Windham County, CT (part)
Ashford town, CT
Chaplin town, CT
Windham town, CT

Hickory—Morganton, NC MSA
Alexander County, NC
Burke County, NC
Caldwell County, NC
Catawba County, NC

Honolulu, HI MSA
Honolulu County, HI

Houma, LA MSA
Lafourche Parish, LA
Terrebonne Parish, LA

**Houston, TX PMSA—see Houston—Galveston—
Brazoria, TX CMSA**

Houston—Galveston—Brazoria, TX CMSA
Brazoria, TX PMSA
Brazoria County, TX
Galveston—Texas City, TX PMSA
Galveston County, TX
Houston, TX PMSA
Chambers County, TX
Fort Bend County, TX
Harris County, TX
Liberty County, TX
Montgomery County, TX
Waller County, TX

Huntington—Ashland, WV—KY—OH MSA
Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Huntsville, AL MSA
Limestone County, AL
Madison County, AL

Indianapolis, IN MSA
Boone County, IN
Hamilton County, IN
Hancock County, IN
Hendricks County, IN
Johnson County, IN
Madison County, IN
Marion County, IN
Morgan County, IN
Shelby County, IN

Iowa City, IA MSA
Johnson County, IA

Jackson, MI MSA
Jackson County, MI

Jackson, MS MSA
Hinds County, MS
Madison County, MS
Rankin County, MS

Jackson, TN MSA
Madison County, TN

Jacksonville, FL MSA
Clay County, FL
Duval County, FL
Nassau County, FL
St. Johns County, FL

Jacksonville, NC MSA
Onslow County, NC

Jamestown, NY MSA
Chautauqua County, NY

Janesville—Beloit, WI MSA
Rock County, WI

Jersey City, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Johnson City—Kingsport—Bristol, TN—VA MSA

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol city, VA

Johnstown, PA MSA

Cambria County, PA
Somerset County, PA

Joplin, MO MSA

Jasper County, MO
Newton County, MO

Kalamazoo—Battle Creek, MI MSA

Calhoun County, MI
Kalamazoo County, MI
Van Buren County, MI

Kankakee, IL PMSA—see Chicago—Gary—Kenosha, IL—IN—WI CMSA

Kansas City, MO—KS MSA

Johnson County, KS
Leavenworth County, KS
Miami County, KS
Wyandotte County, KS
Cass County, MO
Clay County, MO
Clinton County, MO
Jackson County, MO
Lafayette County, MO
Platte County, MO
Ray County, MO

Kenosha, WI PMSA—see Chicago—Gary—Kenosha, IL—IN—WI CMSA

Killeen—Temple, TX MSA

Bell County, TX
Coryell County, TX

Knoxville, TN MSA

Anderson County, TN
Blount County, TN
Knox County, TN
Loudon County, TN
Sevier County, TN
Union County, TN

Kokomo, IN MSA

Howard County, IN
Tipton County, IN

La Crosse, WI—MN MSA

Houston County, MN
La Crosse County, WI

Lafayette, LA MSA

Acadia Parish, LA
Lafayette Parish, LA
St. Landry Parish, LA
St. Martin Parish, LA

Lafayette, IN MSA

Clinton County, IN
Tippecanoe County, IN

Lake Charles, LA MSA

Calcasieu Parish, LA

Lakeland—Winter Haven, FL MSA

Polk County, FL

Lancaster, PA MSA

Lancaster County, PA

Lansing—East Lansing, MI MSA

Clinton County, MI
Eaton County, MI
Ingham County, MI

Laredo, TX MSA

Webb County, TX

Las Cruces, NM MSA

Dona Ana County, NM

Las Vegas, NV—AZ MSA

Mohave County, AZ
Clark County, NV
Nye County, NV

Lawrence, KS MSA

Douglas County, KS

Lawrence, MA—NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Lawton, OK MSA

Comanche County, OK

Lewiston—Auburn, ME MSA

Androscoggin County, ME (part)
Auburn city, ME
Greene town, ME
Lewiston city, ME
Lisbon town, ME
Mechanic Falls town, ME
Poland town, ME
Sabattus town, ME
Turner town, ME
Wales town, ME

Lexington, KY MSA

Bourbon County, KY
Clark County, KY
Fayette County, KY
Jessamine County, KY
Madison County, KY
Scott County, KY
Woodford County, KY

Lima, OH MSA

Allen County, OH
Auglaize County, OH

Lincoln, NE MSA

Lancaster County, NE

Little Rock—North Little Rock, AR MSA

Faulkner County, AR
Lonoke County, AR
Pulaski County, AR
Saline County, AR

Longview—Marshall, TX MSA

Gregg County, TX
Harrison County, TX
Upshur County, TX

Los Angeles—Riverside—Orange County, CA CMSA

Los Angeles—Long Beach, CA PMSA
Los Angeles County, CA
Orange County, CA PMSA
Orange County, CA
Riverside—San Bernardino, CA PMSA
Riverside County, CA
San Bernardino County, CA
Ventura, CA PMSA
Ventura County, CA

Los Angeles—Long Beach, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Louisville, KY—IN MSA

Clark County, IN
Floyd County, IN
Harrison County, IN
Scott County, IN
Bullitt County, KY
Jefferson County, KY
Oldham County, KY

Lowell, MA—NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Lubbock, TX MSA

Lubbock County, TX

Lynchburg, VA MSA

Amherst County, VA
Bedford County, VA
Campbell County, VA
Bedford city, VA
Lynchburg city, VA

Macon, GA MSA

Bibb County, GA
Houston County, GA
Jones County, GA
Peach County, GA
Twiggs County, GA

Madison, WI MSA

Dane County, WI

Manchester, NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Mansfield, OH MSA

Crawford County, OH
Richland County, OH

McAllen—Edinburg—Mission, TX MSA

Hidalgo County, TX

Medford—Ashland, OR MSA

Jackson County, OR

Melbourne—Titusville—Palm Bay, FL MSA

Brevard County, FL

Memphis, TN—AR—MS MSA

Crittenden County, AR
DeSoto County, MS
Fayette County, TN
Shelby County, TN
Tipton County, TN

Merced, CA MSA

Merced County, CA

Miami—Fort Lauderdale, FL CMSA

Fort Lauderdale, FL PMSA
Broward County, FL
Miami, FL PMSA
Dade County, FL

Miami, FL PMSA—see Miami—Fort Lauderdale, FL CMSA

Middlesex—Somerset—Hunterdon, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Milwaukee—Waukesha, WI PMSA—see Milwaukee—Racine, WI CMSA

Milwaukee—Racine, WI CMSA

Milwaukee—Waukesha, WI PMSA
Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI

Milwaukee–Racine, WI CMSA—Con.

Racine, WI PMSA
Racine County, WI

Minneapolis–St. Paul, MN–WI MSA

Anoka County, MN
Carver County, MN
Chisago County, MN
Dakota County, MN
Hennepin County, MN
Isanti County, MN
Ramsey County, MN
Scott County, MN
Sherburne County, MN
Washington County, MN
Wright County, MN
Pierce County, WI
St. Croix County, WI

Mobile, AL MSA

Baldwin County, AL
Mobile County, AL

Modesto, CA MSA

Stanislaus County, CA

Monmouth–Ocean, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Monroe, LA MSA**

Ouachita Parish, LA

Montgomery, AL MSA

Autauga County, AL
Elmore County, AL
Montgomery County, AL

Muncie, IN MSA

Delaware County, IN

Myrtle Beach, SC MSA

Horry County, SC

Naples, FL MSA

Collier County, FL

Nashua, NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Nashville, TN MSA**

Cheatham County, TN
Davidson County, TN
Dickson County, TN
Robertson County, TN
Rutherford County, TN
Sumner County, TN
Williamson County, TN
Wilson County, TN

Nassau–Suffolk, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New Bedford, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****New Haven–Meriden, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New London–Norwich, CT–RI MSA**

Middlesex County, CT (part)
Fenwick borough, CT
Old Saybrook town, CT
New London County, CT (part)
Bozrah town, CT
East Lyme town, CT
Franklin town, CT
Griswold town balance, CT
Groton city, CT
Groton town balance, CT

New London–Norwich, CT–RI MSA—Con.

New London County, CT (part)—Con.
Groton Long Point borough, CT
Jewett City borough, CT
Ledyard town, CT
Lisbon town, CT
Montville town, CT
New London city, CT
North Stonington town, CT
Norwich city, CT
Old Lyme town, CT
Preston town, CT
Salem town, CT
Sprague town, CT
Stonington borough, CT
Stonington town, CT
Waterford town, CT
Windham County, CT (part)
Canterbury town, CT
Plainfield town, CT
Washington County, RI (part)
Hopkinton town, RI
Westerly town, RI

New Orleans, LA MSA

Jefferson Parish, LA
Orleans Parish, LA
Plaquemines Parish, LA
St. Bernard Parish, LA
St. Charles Parish, LA
St. James Parish, LA
St. John the Baptist Parish, LA
St. Tammany Parish, LA

New York, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**

Bergen–Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (part)
Bridgeport city, CT
Easton town, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (part)
Ansonia city, CT
Beacon Falls town, CT
Derby city, CT
Milford city (balance), CT
Oxford town, CT
Seymour town, CT
Woodmont borough, CT
Danbury, CT PMSA
Fairfield County, CT (part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown borough, CT
Newtown town, CT
Redding town, CT
Ridgefield town, CT
Sherman town, CT
Litchfield County, CT (part)
Bridgewater town, CT
New Milford town, CT
Roxbury town, CT
Washington town, CT
Dutchess County, NY PMSA
Dutchess County, NY

New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA—Con.

Jersey City, NJ PMSA
Hudson County, NJ
Middlesex–Somerset–Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth–Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau–Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY
New Haven–Meriden, CT PMSA
Middlesex County, CT (part)
Clinton town, CT
Killingworth town, CT
New Haven County, CT (part)
Bethany town, CT
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT
Woodbridge town, CT
New York, NY PMSA
Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY
Queens County, NY
Richmond County, NY
Rockland County, NY
Westchester County, NY
Newark, NJ PMSA
Essex County, NJ
Morris County, NJ
Sussex County, NJ
Union County, NJ
Warren County, NJ
Newburgh, NY–PA PMSA
Orange County, NY
Pike County, PA
Stamford–Norwalk, CT PMSA
Fairfield County, CT (part)
Darien town, CT
Greenwich town, CT
New Canaan town, CT
Norwalk city, CT
Stamford city, CT
Weston town, CT
Westport town, CT
Wilton town, CT
Trenton, NJ PMSA
Mercer County, NJ
Waterbury, CT PMSA
Litchfield County, CT (part)
Bethlehem town, CT
Thomaston town, CT
Watertown town, CT
Woodbury town, CT
New Haven County, CT (part)
Middlebury town, CT
Naugatuck borough, CT
Prospect town, CT
Southbury town, CT
Waterbury city, CT
Wolcott town, CT

Newark, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Newburgh, NY–PA PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Norfolk–Virginia Beach–Newport News, VA–NC MSA

Currituck County, NC
Gloucester County, VA
Isle of Wight County, VA
James City County, VA
Mathews County, VA
York County, VA
Chesapeake city, VA
Hampton city, VA
Newport News city, VA
Norfolk city, VA
Poquoson city, VA
Portsmouth city, VA
Suffolk city, VA
Virginia Beach city, VA
Williamsburg city, VA

Oakland, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Ocala, FL MSA

Marion County, FL

Odessa–Midland, TX MSA

Ector County, TX
Midland County, TX

Oklahoma City, OK MSA

Canadian County, OK
Cleveland County, OK
Logan County, OK
McClain County, OK
Oklahoma County, OK
Pottawatomie County, OK

Olympia, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Omaha, NE–IA MSA

Pottawattamie County, IA
Cass County, NE
Douglas County, NE
Sarpy County, NE
Washington County, NE

Orange County, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Orlando, FL MSA

Lake County, FL
Orange County, FL
Osceola County, FL
Seminole County, FL

Owensboro, KY MSA

Daviess County, KY

Panama City, FL MSA

Bay County, FL

Parkersburg–Marietta, WV–OH MSA

Washington County, OH
Wood County, WV

Pensacola, FL MSA

Escambia County, FL
Santa Rosa County, FL

Peoria–Pekin, IL MSA

Peoria County, IL
Tazewell County, IL
Woodford County, IL

Philadelphia, PA–NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Atlantic–Cape May, NJ PMSA

Atlantic County, NJ
Cape May County, NJ

Philadelphia, PA–NJ PMSA

Burlington County, NJ
Camden County, NJ
Gloucester County, NJ
Salem County, NJ
Bucks County, PA
Chester County, PA
Delaware County, PA
Montgomery County, PA

Philadelphia County, PA

Vineland–Millville–Bridgeton, NJ PMSA
Cumberland County, NJ

Wilmington–Newark, DE–MD PMSA
New Castle County, DE
Cecil County, MD

Phoenix–Mesa, AZ MSA

Maricopa County, AZ
Pinal County, AZ

Pine Bluff, AR MSA

Jefferson County, AR

Pittsburgh, PA MSA

Allegheny County, PA
Beaver County, PA
Butler County, PA
Fayette County, PA
Washington County, PA
Westmoreland County, PA

Pittsfield, MA MSA

Berkshire County, MA (part)
Adams town, MA
Cheshire town, MA
Dalton town, MA
Hinsdale town, MA
Lanesborough town, MA
Lee town, MA
Lenox town, MA
Pittsfield city, MA
Richmond town, MA
Stockbridge town, MA

Portland, ME MSA

Cumberland County, ME (part)
Cape Elizabeth town, ME
Casco town, ME
Cumberland town, ME
Falmouth town, ME
Freeport town, ME
Gorham town, ME
Gray town, ME
North Yarmouth town, ME
Portland city, ME
Raymond town, ME
Scarborough town, ME
South Portland city, ME
Standish town, ME
Westbrook city, ME
Windham town, ME
Yarmouth town, ME

York County, ME (part)

Buxton town, ME
Hollis town, ME
Limington town, ME
Old Orchard Beach town, ME

Portland–Vancouver, OR–WA PMSA—see Portland–Salem, OR–WA CMSA

Portland–Salem, OR–WA CMSA

Portland–Vancouver, OR–WA PMSA

Clackamas County, OR
Columbia County, OR
Multnomah County, OR
Washington County, OR
Yamhill County, OR
Clark County, WA

Salem, OR PMSA

Marion County, OR
Polk County, OR

Portsmouth–Rochester, NH–ME PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Providence–Fall River–Warwick, RI–MA MSA

Bristol County, MA (part)
Attleboro city, MA
Fall River city, MA
North Attleborough town, MA
Rehoboth town, MA
Seekonk town, MA
Somerset town, MA
Swansea town, MA
Westport town, MA
Bristol County, RI
Barrington town, RI
Bristol town, RI
Warren town, RI
Kent County, RI
Coventry town, RI
East Greenwich town, RI
Warwick city, RI
West Greenwich town, RI
West Warwick town, RI
Newport County, RI (part)
Jamestown town, RI
Little Compton town, RI
Tiverton town, RI

Providence County, RI
Burrillville town, RI
Central Falls city, RI
Cranston city, RI
Cumberland town, RI
East Providence city, RI
Foster town, RI
Glocester town, RI
Johnston town, RI
Lincoln town, RI
North Providence town, RI
North Smithfield town, RI
Pawtucket city, RI
Providence city, RI
Scituate town, RI
Smithfield town, RI
Woonsocket city, RI
Washington County, RI (part)
Charlestown town, RI
Exeter town, RI
Narragansett town, RI
North Kingstown town, RI
Richmond town, RI
South Kingstown town, RI

Provo–Orem, UT MSA

Utah County, UT

Pueblo, CO MSA

Pueblo County, CO

Punta Gorda, FL MSA

Charlotte County, FL

Racine, WI PMSA—see Milwaukee—Racine, WI CMSA

Raleigh—Durham—Chapel Hill, NC MSA

Chatham County, NC
Durham County, NC
Franklin County, NC
Johnston County, NC
Orange County, NC
Wake County, NC

Rapid City, SD MSA

Pennington County, SD

Reading, PA MSA

Berks County, PA

Redding, CA MSA

Shasta County, CA

Reno, NV MSA

Washoe County, NV

Richland—Kennewick—Pasco, WA MSA

Benton County, WA
Franklin County, WA

Richmond—Petersburg, VA MSA

Charles City County, VA
Chesterfield County, VA
Dinwiddie County, VA
Goochland County, VA
Hanover County, VA
Henrico County, VA
New Kent County, VA
Powhatan County, VA
Prince George County, VA
Colonial Heights city, VA
Hopewell city, VA
Petersburg city, VA
Richmond city, VA

Riverside—San Bernardino, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Roanoke, VA MSA

Botetourt County, VA
Roanoke County, VA
Roanoke city, VA
Salem city, VA

Rochester, MN MSA

Olmsted County, MN

Rochester, NY MSA

Genesee County, NY
Livingston County, NY
Monroe County, NY
Ontario County, NY
Orleans County, NY
Wayne County, NY

Rockford, IL MSA

Boone County, IL
Ogle County, IL
Winnebago County, IL

Rocky Mount, NC MSA

Edgecombe County, NC
Nash County, NC

Sacramento, CA PMSA—see Sacramento—Yolo, CA CMSA

Sacramento—Yolo, CA CMSA

Sacramento, CA PMSA
El Dorado County, CA
Placer County, CA
Sacramento County, CA
Yolo, CA PMSA
Yolo County, CA

Saginaw—Bay City—Midland, MI MSA

Bay County, MI
Midland County, MI
Saginaw County, MI

St. Cloud, MN MSA

Benton County, MN
Stearns County, MN

St. Joseph, MO MSA

Andrew County, MO
Buchanan County, MO

St. Louis, MO—IL MSA

Clinton County, IL
Jersey County, IL
Madison County, IL
Monroe County, IL
St. Clair County, IL
Franklin County, MO
Jefferson County, MO
Lincoln County, MO
St. Charles County, MO
St. Louis County, MO
Warren County, MO
St. Louis city, MO

Salem, OR PMSA—see Portland—Salem, OR—WA CMSA

Salinas, CA MSA

Monterey County, CA

Salt Lake City—Ogden, UT MSA

Davis County, UT
Salt Lake County, UT
Weber County, UT

San Angelo, TX MSA

Tom Green County, TX

San Antonio, TX MSA

Bexar County, TX
Comal County, TX
Guadalupe County, TX
Wilson County, TX

San Diego, CA MSA

San Diego County, CA

San Francisco, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

San Francisco—Oakland—San Jose, CA CMSA

Oakland, CA PMSA
Alameda County, CA
Contra Costa County, CA
San Francisco, CA PMSA
Marin County, CA
San Francisco County, CA
San Mateo County, CA
San Jose, CA PMSA
Santa Clara County, CA
Santa Cruz—Watsonville, CA PMSA
Santa Cruz County, CA
Santa Rosa, CA PMSA
Sonoma County, CA
Vallejo—Fairfield—Napa, CA PMSA
Napa County, CA
Solano County, CA

San Jose, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

San Luis Obispo—Atascadero—Paso Robles, CA MSA

San Luis Obispo County, CA

Santa Barbara—Santa Maria—Lompoc, CA MSA

Santa Barbara County, CA

Santa Cruz—Watsonville, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Santa Fe, NM MSA

Los Alamos County, NM
Santa Fe County, NM

Santa Rosa, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Sarasota—Bradenton, FL MSA

Manatee County, FL
Sarasota County, FL

Savannah, GA MSA

Bryan County, GA
Chatham County, GA
Effingham County, GA

Scranton—Wilkes-Barre—Hazleton, PA MSA

Columbia County, PA
Lackawanna County, PA
Luzerne County, PA
Wyoming County, PA

Seattle—Bellevue—Everett, WA PMSA—see Seattle—Tacoma—Bremerton, WA CMSA

Seattle—Tacoma—Bremerton, WA CMSA

Bremerton, WA PMSA
Kitsap County, WA
Olympia, WA PMSA
Thurston County, WA
Seattle—Bellevue—Everett, WA PMSA
Island County, WA
King County, WA
Snohomish County, WA
Tacoma, WA PMSA
Pierce County, WA

Sharon, PA MSA

Mercer County, PA

Sheboygan, WI MSA

Sheboygan County, WI

Sherman—Denison, TX MSA

Grayson County, TX

Shreveport—Bossier City, LA MSA

Bossier Parish, LA
Caddo Parish, LA
Webster Parish, LA

Sioux City, IA—NE MSA

Woodbury County, IA
Dakota County, NE

Sioux Falls, SD MSA

Lincoln County, SD
Minnehaha County, SD

South Bend, IN MSA

St. Joseph County, IN

Spokane, WA MSA

Spokane County, WA

Springfield, IL MSA

Menard County, IL
Sangamon County, IL

Springfield, MO MSA

Christian County, MO
Greene County, MO
Webster County, MO

Springfield, MA MSA

Franklin County, MA (part)
Sunderland town, MA
Hampden County, MA (part)
Agawam city, MA
Chicopee city, MA

Springfield, MA MSA—Con.

Hampden County, MA (part)—Con.
 East Longmeadow town, MA
 Hampden town, MA
 Holyoke city, MA
 Longmeadow town, MA
 Ludlow town, MA
 Monson town, MA
 Montgomery town, MA
 Palmer town, MA
 Russell town, MA
 Southwick town, MA
 Springfield city, MA
 Westfield city, MA
 West Springfield town, MA
 Wilbraham town, MA
 Hampshire County, MA (part)
 Amherst town, MA
 Belchertown town, MA
 Easthampton town, MA
 Granby town, MA
 Hadley town, MA
 Hatfield town, MA
 Huntington town, MA
 Northampton city, MA
 Southampton town, MA
 South Hadley town, MA
 Ware town, MA
 Williamsburg town, MA

Stamford–Norwalk, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**State College, PA MSA**
Centre County, PA**Steubenville–Weirton, OH–WV MSA**

Jefferson County, OH
 Brooke County, WV
 Hancock County, WV

Stockton–Lodi, CA MSA
San Joaquin County, CA**Sumter, SC MSA**
Sumter County, SC**Syracuse, NY MSA**
Cayuga County, NY
Madison County, NY
Onondaga County, NY
Oswego County, NY**Tacoma, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA****Tallahassee, FL MSA**
Gadsden County, FL
Leon County, FL**Tampa–St. Petersburg–Clearwater, FL MSA**
Hernando County, FL
Hillsborough County, FL
Pasco County, FL
Pinellas County, FL**Terre Haute, IN MSA**
Clay County, IN
Vermillion County, IN
Vigo County, IN**Texarkana, TX–Texarkana, AR MSA**
Miller County, AR
Bowie County, TX**Toledo, OH MSA**

Fulton County, OH
 Lucas County, OH
 Wood County, OH

Topeka, KS MSA
Shawnee County, KS**Trenton, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****Tucson, AZ MSA**
Pima County, AZ**Tulsa, OK MSA**
Creek County, OK
Osage County, OK
Rogers County, OK
Tulsa County, OK
Wagoner County, OK**Tuscaloosa, AL MSA**
Tuscaloosa County, AL**Tyler, TX MSA**
Smith County, TX**Utica–Rome, NY MSA**
Herkimer County, NY
Oneida County, NY**Vallejo–Fairfield–Napa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA****Ventura, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA****Victoria, TX MSA**
Victoria County, TX**Vineland–Millville–Bridgeton, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Visalia–Tulare–Porterville, CA MSA**
Tulare County, CA**Waco, TX MSA**
McLennan County, TX**Washington, DC–MD–VA–WV PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA****Washington–Baltimore, DC–MD–VA–WV CMSA**
Baltimore, MD PMSA
Anne Arundel County, MD
Baltimore County, MD
Carroll County, MD
Harford County, MD
Howard County, MD
Queen Anne's County, MD
Baltimore city, MD
Hagerstown, MD PMSA
Washington County, MD
Washington, DC–MD–VA–WV PMSA
District of Columbia, DC
Calvert County, MD
Charles County, MD
Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA**Washington–Baltimore, DC–MD–VA–WV CMSA—Con.**

Washington, DC–MD–VA–WV PMSA—Con.
 Fauquier County, VA
 King George County, VA
 Loudoun County, VA
 Prince William County, VA
 Spotsylvania County, VA
 Stafford County, VA
 Warren County, VA
 Alexandria city, VA
 Fairfax city, VA
 Falls Church city, VA
 Fredericksburg city, VA
 Manassas city, VA
 Manassas Park city, VA
 Berkeley County, WV
 Jefferson County, WV

Waterbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Waterloo–Cedar Falls, IA MSA**
Black Hawk County, IA**Wausau, WI MSA**
Marathon County, WI**West Palm Beach–Boca Raton, FL MSA**
Palm Beach County, FL**Wheeling, WV–OH MSA**
Belmont County, OH
Marshall County, WV
Ohio County, WV**Wichita, KS MSA**
Butler County, KS
Harvey County, KS
Sedgwick County, KS**Wichita Falls, TX MSA**
Archer County, TX
Wichita County, TX**Williamsport, PA MSA**
Lycoming County, PA**Wilmington–Newark, DE–MD PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Wilmington, NC MSA**
Brunswick County, NC
New Hanover County, NC**Worcester, MA–CT PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****Yakima, WA MSA**
Yakima County, WA**Yolo, CA PMSA—see Sacramento–Yolo, CA CMSA****York, PA MSA**
York County, PA**Youngstown–Warren, OH MSA**
Columbiana County, OH
Mahoning County, OH
Trumbull County, OH**Yuba City, CA MSA**
Sutter County, CA
Yuba County, CA**Yuma, AZ MSA**
Yuma County, AZ

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

- Printed reports [P]
- CD-ROM [C]
- Highlights online [+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through January 1996) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available March 1996 through May 1996) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available November 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

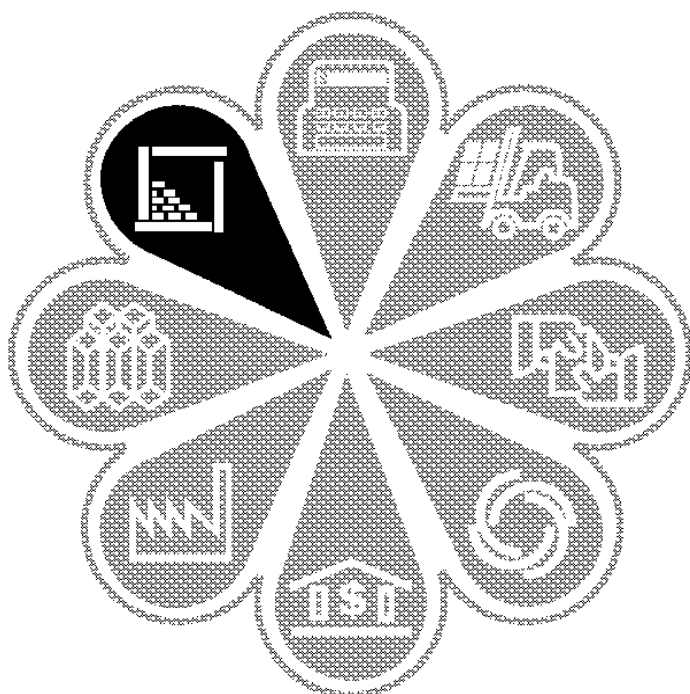
Census of Construction Industries

CC92-A-2

GEOGRAPHIC AREA SERIES

Middle Atlantic States

New Jersey, New York, Pennsylvania



Acknowledgments

Many persons participated in the various activities of the 1992 Census of Construction Industries. The overall planning and review of the census operations were performed by the Economic Census Staff of the Economic Planning and Coordination Division.

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Computer processing was performed in the Computer Services Division, **Marvin D. Raines**, Chief.

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If you have any questions concerning the statistics in this report, call 301-457-4680.

1992

Census of

Construction Industries

CC92-A-2

GEOGRAPHIC AREA SERIES

Middle Atlantic

States

New Jersey, New York, Pennsylvania

Issued April 1996



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Ronald H. Brown, Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director



**Economics and Statistics
Administration**

Everett M. Ehrlich, Under Secretary
for Economic Affairs



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Martha Farnsworth Riche, Director
Bryant Benton, Deputy Director

Paula J. Schneider, Principal Associate
Director for Programs

Frederick T. Knickerbocker, Associate
Director for Economic Programs

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for Economic Programs

**ECONOMIC PLANNING AND COORDINATION
DIVISION**

John P. Govoni, Chief

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David W. Cartwright, Chief

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

IV INTRODUCTION

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

CONSTRUCTION—GEOGRAPHIC AREA SERIES

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Assets and depreciation (gross book value):					
Beginning of year—buildings, machinery, and equipment	4				
End of year—total	2, 4	2	6	7	
End of year—buildings, machinery, and equipment	4				
Depreciation charges during year—buildings, machinery, and equipment	4				
Capital expenditures:					
Total capital expenditures	2, 4	2	6	7	11
New buildings—machinery and equipment	4				
Used buildings—machinery and equipment	4				
Communication services, costs for	3				
Employees:					
All employees—average number	1, 2, 3	2	6	7	11
Construction workers—average number	2, 3, 9	2, 9			
Construction workers—quarterly	3, 9	9			
Other employees—average number	3				
Other employees—quarterly	3				
Establishments:					
Number in business during year:					
All	1				
With payroll	1, 2, 3, 5, 9	2, 9	6	7	11
Without payroll	1				
Fringe benefits—legally required and voluntary expenditures	3				
Inventories	5				
Materials, components, supplies, and fuels—costs for	2, 3	2	6	7	11
Ownership—private or government owned	3				
Payroll:					
First-quarter, all employees	3				
Annual:					
All employees	2, 3	2	6	7	11
Construction workers	2, 3	2			
Other employees	3				
Power, fuels, and lubricants—costs for	3				
Proprietors and working partners:					
All establishments	1				
Establishments with payroll	1, 3				
Establishments without payroll	1				
Ratios, selected industry	10	10			
Receipts and value:					
Dollar value of business done:					
All establishments	1				
Establishments with payroll	1, 3		6	7	
Establishments without payroll	1				
Value of construction work, total	2, 3, 5, 8	2	6	7	11
For work subcontracted in from others	2, 3	2			
Other business receipts	3				

See footnotes at end of table.

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Receipts and value:—Con.					
Net value of construction work.	2, 3	2	6	7	11
Value added.	2, 3	2	6	7	11
Rental costs:					
Total.	2, 3	2	6	7	
For machinery and equipment.	3				
For buildings.	3				
Repairs to buildings and other structures.	3				
Repairs to machinery and equipment.	3				
Subcontract work to others, costs for.	2, 3	2	6	7	11
Type and class of construction ²	8				

Note: Data for 1987 and earlier years are also available in some of these tables.

¹CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan statistical area.

²Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.



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New Jersey

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for New Jersey. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 56,627 establishments in this State operating in the construction industries. These establishments accounted for \$18.3 billion in total dollar value of business done.

Most of the 56,627 construction establishments were small. Of the total, 36,984 were nonemployers, and over half of the employer establishments had less than 5 employees. The 6,263 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 78 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$16.8 billion in total dollar value of business done. Of this amount, \$16.5 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$3.5 billion, leaving net value of construction work of \$13.0 billion. In addition, these establishments paid out \$5.4 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$8.4 billion. (See Introduction and appendixes for explanation of terms.)

There were 19,643 establishments with total employment averaging 131,376 during the year. Total payroll for 1992 was \$4.0 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 36,984 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$1.5 billion. Most of these establishments, about 82 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

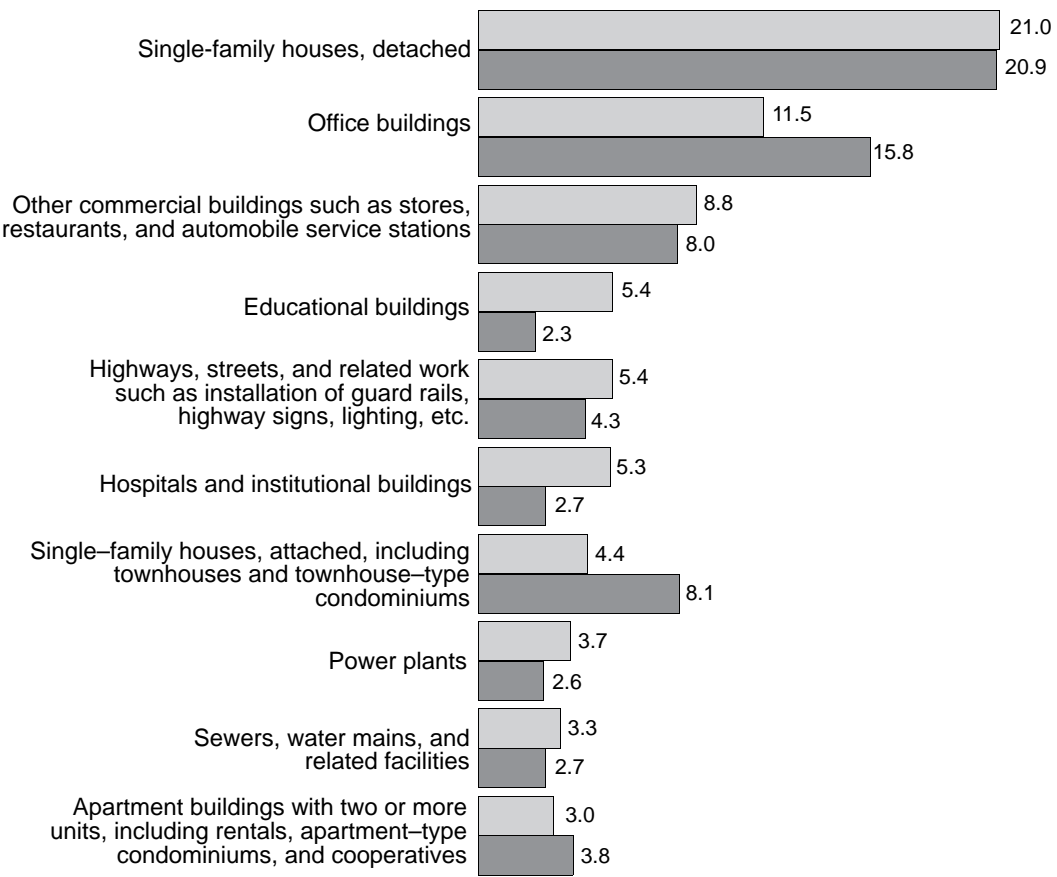




Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

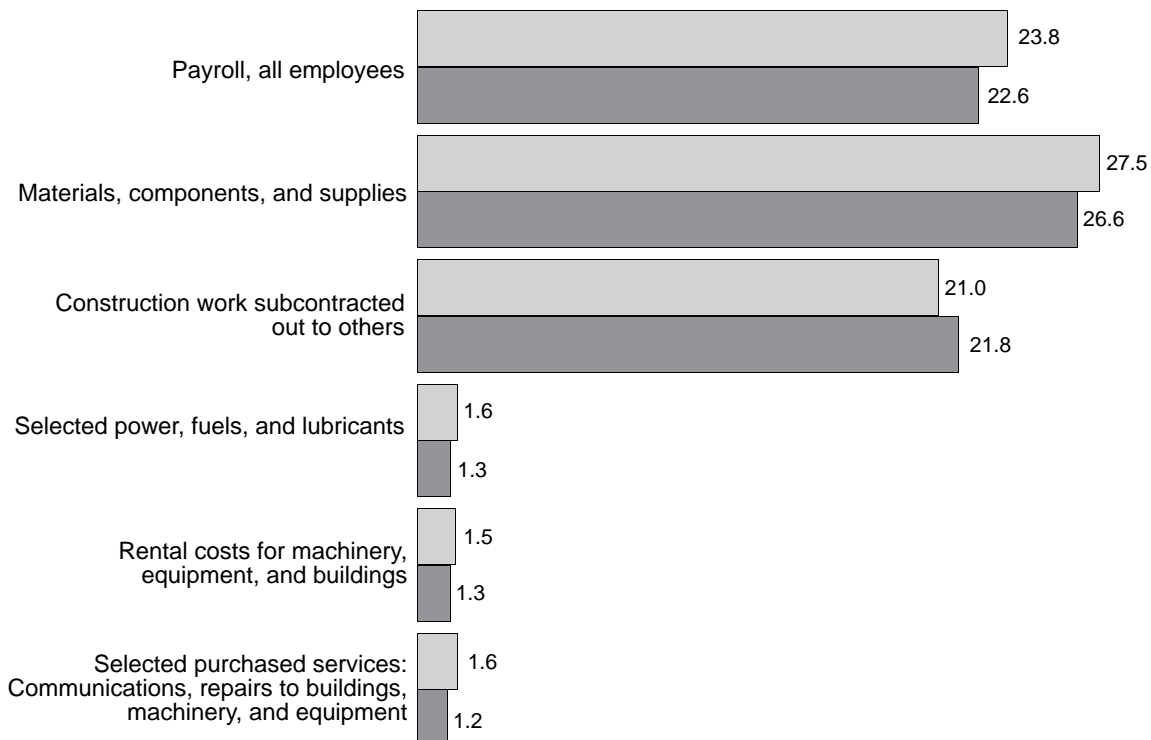


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column —	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done ¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	56 627	39 956	131 376	18 300 743	36 984	34 329	1 451 127	19 643	5 627	131 376	16 849 616	1	1
15	Building construction—General contractors and operative builders ----	11 705	6 488	30 235	6 716 989	6 397	5 086	515 379	5 308	1 402	30 235	6 201 610	1	2
16	Heavy construction other than building construction—contractors -----	1 316	402	18 711	2 895 075	377	308	18 809	939	94	18 711	2 876 266	1	1
17	Special trade contractors -----	43 606	33 066	82 430	8 688 678	30 210	28 935	916 939	13 396	4 131	82 430	7 771 739	1	1
1711	Plumbing, heating, and air-conditioning --	6 343	3 797	18 189	2 110 995	3 312	3 087	128 328	3 031	710	18 189	1 982 667	1	1
1731	Electrical work -----	5 053	2 917	15 640	1 556 603	2 730	2 330	72 246	2 323	587	15 640	1 484 357	1	1
	1987													
15, 16, 17	Construction industries ² -----	59 711	39 957	187 617	24 289 173	37 463	35 525	3 058 776	22 248	4 432	187 617	21 230 397	1	1
15	Building construction—General contractors and operative builders ----	14 087	7 342	46 275	10 048 705	7 861	6 490	1 110 306	6 226	852	46 275	8 938 399	1	1
16	Heavy construction other than building construction—contractors -----	1 283	370	24 835	2 736 155	295	274	33 390	988	96	24 835	2 702 765	1	1
17	Special trade contractors -----	43 285	31 481	114 084	10 418 427	28 469	28 016	1 220 010	14 816	3 465	114 084	9 198 417	1	1
1711	Plumbing, heating, and air-conditioning --	5 922	3 522	23 788	2 339 955	2 882	2 830	149 623	3 040	692	23 788	2 190 332	1	2
1731	Electrical work -----	4 312	2 365	20 708	1 592 688	2 066	1 917	78 332	2 246	448	20 708	1 514 356	1	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹	19 643	131 376	99 149	4 009 157	2 799 092	16 492 684	12 951 750	8 401 275
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses	3 394	10 282	7 633	202 575	140 893	1 152 543	862 965	471 768
1522	Other residential buildings	213	1 438	1 072	44 818	26 770	249 688	175 532	106 392
1531	Operative builders	559	4 058	1 588	122 571	36 441	1 472 728	958 805	648 651
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses	270	4 347	3 132	128 506	80 206	661 275	389 547	261 789
1542	Nonresidential buildings, n.e.c.	872	10 110	6 946	348 267	211 512	2 506 283	1 257 986	805 954
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction	335	5 671	4 563	209 177	158 444	862 976	696 549	430 226
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction	24	1 067	846	48 780	35 824	169 713	146 054	94 691
1623	Water, sewer, and utility lines	223	4 967	4 040	199 617	149 056	688 829	610 053	437 381
1629	Heavy construction, n.e.c.	358	7 005	5 344	273 413	193 031	1 033 561	907 840	733 164
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning	3 031	18 189	13 087	597 787	413 598	1 963 728	1 716 376	1 045 994
1721	Painting and paper hanging	1 049	4 130	3 523	89 769	70 937	250 453	232 508	175 312
1731	Electrical work	2 323	15 640	12 057	537 554	405 524	1 478 927	1 419 148	907 271
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework	903	4 432	3 710	99 212	76 453	334 767	302 850	198 229
1742	Plastering, drywall, and insulation work	436	5 106	4 240	167 067	128 180	444 705	398 241	274 721
1743	Terrazzo, tile, marble, and mosaic work	207	786	636	23 074	16 796	78 328	68 220	43 067
175	Carpentry and floor work:								
1751	Carpentry	1 558	5 305	4 173	121 704	87 854	544 315	446 526	250 118
1752	Floor laying and other floor work	318	1 613	1 231	42 199	29 134	152 643	139 688	79 688
1761	Roofing, siding, and sheet metal work	1 024	5 735	4 542	154 364	113 240	514 484	465 557	283 670
1771	Concrete work	585	3 788	3 194	101 896	79 144	337 570	313 709	182 542
1781	Water well drilling	75	491	374	15 479	10 726	58 839	52 910	32 482
179	Miscellaneous special trade contractors:								
1791	Structural steel erection	131	2 834	2 326	84 803	62 406	267 848	236 210	171 584
1793	Glass and glazing work	156	1 063	737	30 393	19 832	99 102	94 848	54 188
1794	Excavation work	463	2 215	1 773	59 766	46 050	198 211	177 315	127 812
1795	Wrecking and demolition work, n.e.c.	37	745	601	18 811	12 493	75 765	68 369	54 741
1796	Installing building equipment, n.e.c.	138	2 814	2 015	101 659	72 363	324 809	295 763	184 069
1799	Special trade contractors, n.e.c.	963	7 546	5 768	185 899	122 186	570 594	518 179	345 771

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
4 907 406	3 540 934	4 407 998	254 758	187 672	2 188 132	187 617	20 064 340	10 165 521	1	1	3	15, 16, 17
												15
403 302	289 578	65 983	10 820	9 176	120 506	16 262	1 709 637	703 419	3	4	13	152
71 674	74 156	*21 429	2 711	*947	23 535	2 477	336 878	113 019	10	9	64	1521
383 802	513 923	4 659	4 912	8 833	122 022	8 311	2 570 031	1 022 611	4	6	10	1531
134 252	271 728	44 012	4 854	4 251	37 817	3 915	696 373	227 424	3	3	5	154
516 344	1 248 298	94 308	22 374	11 257	127 921	15 310	2 899 495	942 045	2	2	13	1542
												16
284 657	166 427	192 844	28 662	23 568	285 389	7 016	838 067	469 724	2	2	3	1611
54 835	23 659	12 518	6 315	1 873	37 980	1 581	213 386	123 530	1	1	8	162
182 420	78 776	112 398	26 075	15 954	190 930	5 343	547 106	348 243	3	2	6	1622
264 310	125 721	226 382	19 510	20 585	212 604	10 895	952 518	755 047	3	2	8	1623
												17
689 322	247 352	830 128	30 415	19 895	211 192	23 788	2 167 859	1 155 305	1	1	8	1711
60 299	17 944	110 560	5 578	3 815	33 906	5 141	275 169	198 969	4	3	15	1721
517 306	59 779	672 603	19 506	15 214	140 809	20 708	1 504 610	941 688	1	1	7	1731
(D)	31 916	228 913	5 111	2 327	48 962	7 618	554 816	328 876	5	4	25	174
126 479	46 464	390 026	4 405	6 673	40 790	7 278	624 373	368 401	4	5	9	1742
26 483	(S)	61 492	1 410	943	8 666	1 763	122 814	73 709	9	8	33	1743
199 763	97 790	242 235	7 607	5 604	41 916	7 873	525 130	291 625	4	7	16	175
61 475	12 955	92 307	2 815	1 137	10 924	2 286	206 531	107 962	4	5	23	1751
182 022	48 927	222 736	6 587	4 167	63 749	9 027	715 806	417 441	3	3	15	1761
135 358	23 861	185 110	7 236	6 867	84 518	6 635	528 415	299 478	4	4	21	1771
20 463	5 929	9 744	738	840	19 106	566	49 814	29 011	5	5	14	1781
69 093	31 638	117 837	5 728	2 715	38 509	2 808	228 986	176 422	5	1	7	179
44 390	4 253	71 653	2 485	672	13 867	1 641	159 384	82 756	8	6	29	1791
52 410	20 896	110 322	7 624	8 786	149 748	4 887	451 989	304 501	6	6	22	1793
(D)	(S)	35 964	2 119	*1 240	8 659	683	47 875	39 988	4	6	65	1794
112 968	29 046	64 880	4 863	1 327	23 396	3 084	339 190	224 164	1	1	(Z)	1795
189 105	52 414	186 953	14 299	9 006	90 711	8 298	561 759	347 105	4	4	17	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	19 643	22 248	15 530	15 388	(Z)	1	1	2
Proprietors and working partners	5 627	4 432	4 009	6 504	2	4	4	4
All employees**	131 376	187 617	121 467	115 043	1	1	1	1
Construction workers:								
March	90 137	132 722	84 208	79 229	1	1	1	1
May	100 724	148 790	100 349	101 731	1	1	1	1
August	106 712	156 673	106 347	106 993	1	1	1	1
November	99 024	148 074	98 087	98 947	1	1	1	1
Average	99 149	146 565	98 810	96 806	1	1	1	1
Other employees:								
March	32 591	39 958	22 432	17 255	1	1	1	1
May	32 178	40 911	(NA)	(NA)	1	1	(NA)	(NA)
August	31 928	41 739	(NA)	(NA)	1	1	(NA)	(NA)
November	32 211	41 619	(NA)	(NA)	1	1	(NA)	(NA)
Average	32 227	41 057	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	4 009 157	4 788 380	2 279 343	1 493 471	(Z)	(Z)	1	1
Payroll, construction workers	2 799 092	3 363 212	1 765 318	1 185 829	(Z)	(Z)	1	1
Payroll, other employees	1 210 065	1 425 168	514 025	307 643	1	1	1	1
First-quarter payroll, all employees	889 888	1 020 647	483 015	272 613	1	1	1	1
Fringe benefits, all employees	1 045 528	1 090 514	425 440	292 463	1	1	1	(Z)
Legally required expenditures	618 951	732 288	326 805	156 679	1	1	1	1
Voluntary expenditures	426 577	358 226	98 635	135 783	1	1	1	(Z)
Dollar value of business done	16 849 616	21 230 397	8 940 662	5 655 701	1	1	1	1
Value of construction work	16 492 684	20 064 340	8 718 512	5 489 386	1	1	1	1
Value of construction work subcontracted in from others	4 407 998	4 767 481	2 137 584	1 402 690	2	1	1	1
Other business receipts	356 932	675 566	162 062	166 315	2	2	2	3
Net value of construction†	12 951 750	15 427 920	6 871 562	4 258 469	1	1	1	1
Value added††	8 401 275	10 165 521	4 392 823	2 584 532	1	1	1	1
Selected costs	8 448 341	10 574 384	4 487 750	2 999 052	1	1	1	1
Materials, components, and supplies	4 638 799	5 655 665	2 479 330	1 676 547	1	1	1	1
Construction work subcontracted out to others	3 540 934	4 636 419	1 846 949	1 230 916	1	1	1	1
Selected power, fuels, and lubricants	268 608	282 299	161 470	91 589	1	1	1	1
Electricity	48 373	43 585	24 390	15 150	2	1	2	2
Natural gas	14 590	10 239	5 741	4 230	3	2	4	4
Gasoline and diesel fuel	190 985	209 043	121 384	60 142	1	1	1	1
On highway use	139 245	162 513	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	51 739	46 530	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases	14 660	19 431	9 954	12 069	4	2	3	3
Rental cost for machinery, equipment, and buildings	254 758	285 212	119 095	67 513	2	1	1	1
For machinery and equipment	150 364	191 639	90 116	53 160	2	2	1	2
For buildings	104 394	93 573	28 979	14 352	2	2	2	2
Selected purchased services	273 703	262 213	127 273	91 261	1	1	1	1
Communication services	95 753	88 756	41 392	31 400	2	2	2	1
Repairs to buildings and other structures	17 341	17 737	9 139	5 187	4	4	3	4
Repairs to machinery and equipment	160 609	155 720	76 741	54 674	2	1	1	2
Ownership of construction projects:								
Value of construction work	16 492 684	20 064 340	8 718 512	5 489 386	1	1	1	1
Government owned	3 769 793	2 651 205	1 725 308	1 126 539	2	2	2	1
Federal	692 121	452 104	(NA)	(NA)	4	3	(NA)	(NA)
State and local	3 077 673	2 199 100	(NA)	(NA)	2	2	(NA)	(NA)
Privately owned	12 722 890	17 413 134	6 993 203	4 362 847	1	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	2 096 376	1 822 089	2	2
Capital expenditures, other than land -----	187 672	326 885	3	2
New -----	145 032	279 666	3	2
Used -----	42 640	47 218	6	5
Retirements and disposition of depreciable assets -----	95 916	102 179	8	6
End-of-year gross book value of depreciable assets -----	2 188 132	2 046 795	2	2
Depreciation charges during year -----	224 568	268 195	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	328 074	428 125	4	6
Capital expenditures, other than land -----	20 476	42 167	6	5
New buildings and other structures -----	15 395	28 110	4	5
Used buildings and other structures -----	(S)	14 056	(S)	12
Retirements and disposition of depreciable assets -----	6 517	43 765	11	12
End-of-year gross book value of depreciable assets -----	342 033	426 527	4	5
Depreciation charges during year -----	26 543	36 449	7	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 768 303	1 393 963	2	2
Capital expenditures, other than land -----	167 196	284 718	3	2
New machinery and equipment, including automobiles and trucks -----	129 637	251 556	3	3
New automobiles and trucks, intended primarily for highway use -----	54 610	129 696	4	3
Used machinery and equipment, including automobiles and trucks -----	37 558	33 161	6	6
Retirements and disposition of depreciable assets -----	89 399	58 414	9	4
End-of-year gross book value of depreciable assets -----	1 846 099	1 620 268	2	1
Depreciation charges during year -----	198 025	231 746	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	19 643	(Z)
Value of construction work	16 492 684	1
Establishments with inventories:		
Number	5 647	2
Value of construction work	5 902 946	1
Inventories ¹ :		
End of 1992, materials and supplies	179 360	6
End of 1991, materials and supplies	182 577	6
Establishments with no inventories:		
Number	7 213	2
Value of construction work	5 596 640	1
Establishments not reporting:		
Number	6 783	2
Value of construction work	4 993 098	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								1,000 employees or more	
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	19 643	13 381	3 587	1 549	799	211	91	20	4	2	
All employees** -----	131 376	24 184	22 586	20 377	23 683	14 410	13 246	6 307	6 583	(D)	
Payroll, all employees -----	4 009 157	475 288	586 206	628 056	816 624	520 075	527 607	249 980	205 320	(D)	
Dollar value of business done -----	16 849 616	2 543 206	2 462 172	2 510 294	3 131 815	2 053 997	2 103 860	871 733	1 172 540	(D)	
Value of construction work -----	16 492 684	2 521 726	2 417 676	2 475 135	3 086 855	1 974 539	2 059 025	867 586	1 090 143	(D)	
Net value of construction work† -----	12 951 750	2 095 946	1 942 046	1 986 038	2 388 029	1 454 074	1 516 886	744 596	824 134	(D)	
Value added†† -----	8 401 275	1 213 444	1 159 877	1 260 572	1 554 048	1 012 231	1 047 568	506 631	646 904	(D)	
Cost of materials, components, supplies, and fuels -----	4 907 406	903 982	826 665	760 626	878 941	521 301	514 153	242 112	259 627	(D)	
Cost of construction work subcontracted out to others --	3 540 934	425 780	475 629	489 096	698 826	520 465	542 139	122 990	266 009	(D)	
Rental cost for machinery, equipment, and buildings ----	254 758	32 104	38 168	40 844	52 910	38 041	29 530	19 319	3 841	(D)	
Capital expenditures, other than land -----	187 672	28 175	33 214	30 873	34 641	23 271	20 935	12 968	3 595	(D)	
End-of-year gross book value of depreciable assets ----	2 188 132	346 324	385 683	391 251	422 586	264 850	210 517	152 967	13 954	(D)	
1987											
All employees** -----	187 617	(S)	28 336	30 073	38 725	19 384	20 459	13 505	9 928	(D)	
Value of construction work -----	20 064 340	(S)	2 392 029	3 043 632	4 394 590	2 297 613	4 581 581	(D)	720 352	(D)	
Value added†† -----	10 165 521	(S)	1 243 201	1 472 896	2 133 069	1 202 031	1 270 665	1 047 363	541 531	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	2	3	3	2	1	(Z)	(Z)	(Z)	(D)	
Net value of construction work† -----	1	3	3	3	1	(Z)	(Z)	(Z)	(Z)	(D)	
Capital expenditures, other than land -----	3	9	8	6	3	(Z)	(Z)	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	19 643	(S)	(S)	3 205	5 491	3 565	2 069	1 685	594	316	219
All employees** -----	131 376	(S)	(S)	4 593	13 303	15 194	15 170	22 589	14 734	14 170	29 285
Payroll, all employees -----	4 009 157	(S)	(S)	61 034	233 978	341 245	399 195	711 160	498 871	518 189	1 225 379
Dollar value of business done -----	16 849 616	(S)	(S)	237 030	878 851	1 250 090	1 443 540	2 584 924	2 046 307	2 132 072	6 208 509
Value of construction work -----	16 492 684	(S)	(S)	235 327	871 719	1 237 615	1 427 067	2 539 696	2 009 849	2 103 512	6 000 374
Net value of construction work† -----	12 951 750	(S)	(S)	218 148	801 069	1 100 927	1 217 573	2 103 678	1 599 929	1 592 380	4 254 388
Value added†† -----	8 401 275	(S)	(S)	131 582	475 829	656 933	755 257	1 321 394	1 047 000	993 427	2 980 295
Cost of materials, components, supplies, and fuels -----	4 907 406	(S)	(S)	88 268	332 373	456 469	478 790	827 512	589 387	627 513	1 482 228
Cost of construction work subcontracted out to others -----	3 540 934	(S)	(S)	17 179	70 650	136 688	209 493	436 018	409 920	511 132	1 745 986
Rental cost for machinery, equipment, and buildings -----	254 758	(S)	(S)	3 724	13 554	23 668	22 306	45 017	30 877	37 168	77 900
Capital expenditures, other than land -----	187 672	(S)	(S)	(S)	10 686	19 924	20 356	33 837	19 893	19 783	58 691
End-of-year gross book value of depreciable assets -----	2 188 132	(S)	(S)	(S)	152 954	200 141	242 494	451 128	273 688	231 789	584 817
1987											
All employees** -----	187 617	(S)	(S)	(S)	(S)	20 109	21 585	32 429	23 537	21 300	41 953
Value of construction work -----	20 064 340	(S)	(S)	(S)	(S)	1 347 545	1 758 118	3 163 495	2 689 654	2 602 539	7 218 780
Value added†† -----	10 165 521	(S)	(S)	(S)	(S)	749 667	911 446	1 663 612	1 385 239	1 320 760	3 397 996
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	5	4	4	4	2	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	4	3	4	4	3	3	3	1
Capital expenditures, other than land -----	3	(S)	(S)	(S)	12	12	11	7	2	4	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	16 492 684	9 000 728	4 783 687	2 222 009	1	1	1	1
Building construction	12 307 223	6 937 836	3 866 439	1 502 948	1	1	2	2
Single-family houses	4 190 150	2 821 900	948 547	419 703	2	3	4	3
Single-family houses, detached	3 465 036	2 292 887	820 188	351 961	3	4	4	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	725 114	529 013	128 359	67 742	6	8	16	9
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	499 076	237 547	153 204	108 326	5	8	7	9
Other residential buildings, including hotels, motels, and tourist cabins.....	144 345	46 976	70 958	26 411	5	8	6	8
Office buildings	1 894 940	1 058 217	639 237	197 486	1	1	2	3
Other commercial buildings such as stores, restaurants, and automobile service stations	1 451 641	757 612	487 606	206 423	2	3	4	5
Industrial buildings and warehouses	1 977 205	987 285	630 644	359 276	1	2	3	3
Industrial buildings	1 641 199	803 683	532 378	305 138	1	2	2	3
Warehouses	336 006	183 602	98 266	54 138	4	4	11	4
Religious buildings	118 863	48 150	53 065	17 648	5	9	6	7
Educational buildings	894 904	424 286	395 212	75 406	4	3	7	10
Hospitals and institutional buildings	867 432	445 351	355 977	66 104	1	1	3	4
Other nonresidential buildings	268 666	110 512	131 989	26 165	4	6	4	9
Nonbuilding construction	3 699 201	2 062 892	917 248	719 061	1	1	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	890 199	398 457	225 021	266 720	2	2	5	2
Private driveways and parking areas	93 622	52 083	24 026	17 513	10	11	16	18
Fencing	71 187	46 245	8 868	16 074	15	17	22	21
Bridges, tunnels, and elevated highways	287 761	115 188	114 803	57 769	1	2	1	3
Conservation and development construction	83 774	67 181	8 838	7 755	7	5	27	12
Power and communication transmission lines, towers, and related facilities.....	158 877	101 249	39 557	18 071	5	8	2	2
Sewers, water mains, and related facilities.....	550 577	350 805	129 702	70 070	3	3	2	10
Sewers, sewer lines, septic systems, and related facilities	341 735	221 677	74 647	45 411	3	3	2	14
Water mains and related facilities	208 842	129 128	55 056	24 659	4	6	2	7
Pipeline construction other than sewer or water lines	239 126	139 408	21 977	77 741	1	2	(Z)	(Z)
Mass transit construction	120 754	(D)	70 287	(D)	12	(D)	2	(D)
Blast furnaces, petroleum refineries, chemical complexes, etc.	158 733	57 174	30 453	71 106	2	3	6	3
Power plants	609 415	(D)	126 609	(D)	1	(D)	2	(D)
Sewage treatment and water treatment plants	189 332	99 076	73 243	17 013	4	5	8	9
Other nonbuilding construction	245 844	151 766	43 863	50 216	4	5	3	6
Construction work, n.s.k.	486 260	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1987								
Value of construction work	20 064 340	12 981 725	4 275 963	1 924 824	1	1	1	2
Building construction	15 784 011	10 833 802	3 539 305	1 410 906	1	1	1	2
Single-family houses	5 829 172	4 545 171	878 794	405 206	2	2	3	6
Single-family houses, detached	4 200 430	3 054 080	799 519	346 830	2	3	3	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	1 628 742	1 491 091	79 275	58 375	3	3	8	10
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	767 450	555 108	137 686	74 655	8	10	9	6
Other residential buildings, including hotels, motels, and tourist cabins.....	828 198	623 343	152 200	52 653	3	4	5	6
Office buildings	3 173 072	2 204 351	757 289	211 431	1	1	2	2
Other commercial buildings such as stores, restaurants, and automobile service stations	1 599 174	972 580	385 750	240 843	1	2	2	3
Industrial buildings and warehouses	2 040 782	1 212 837	543 822	284 122	1	2	2	3
Industrial buildings	1 519 868	836 349	434 904	248 615	1	2	3	3
Warehouses	520 914	376 488	108 918	35 507	3	4	4	4
Religious buildings	116 681	50 216	40 540	25 924	6	7	10	8
Educational buildings	456 963	235 842	167 219	53 901	3	3	5	5
Hospitals and institutional buildings	547 291	292 123	216 351	38 817	2	1	3	5
Other nonresidential buildings	425 228	142 231	259 654	23 354	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	3 398 500	2 147 923	736 658	513 918	1	1	1	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	856 268	470 278	234 785	151 203	2	4	2	4
Private driveways and parking areas	133 547	99 866	17 534	16 146	6	6	10	18
Bridges, tunnels, and elevated highways	236 854	129 578	90 629	16 647	1	2	1	2
Power and communication transmission lines, towers, and related facilities.....	122 333	57 337	40 562	24 432	4	5	4	11
Sewers, water mains, and related facilities	537 825	357 962	130 266	49 595	2	2	5	7
Sewers, sewer lines, septic systems, and related facilities	312 233	225 368	56 977	29 887	3	3	7	7
Water mains and related facilities	225 591	132 593	73 289	19 708	2	2	4	9
Pipeline construction other than sewer or water lines	151 903	113 200	22 300	16 403	2	2	4	4
Mass transit construction	75 747	41 984	18 900	14 863	9	7	8	28
Blast furnaces, petroleum refineries, chemical complexes, etc.	120 832	40 022	39 464	41 345	6	16	3	5
Power plants	514 180	391 754	31 932	90 493	1	(Z)	2	3
Sewage treatment and water treatment plants	115 988	86 707	22 019	7 262	5	5	5	15
Other nonbuilding construction	533 022	359 234	88 266	85 528	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	881 829	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	19 643	99 149	90 137	100 724	106 712	99 024	(Z)	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	3 394	7 633	7 209	7 699	8 129	7 494	2	4	4	4	4	4
1522	Other residential buildings -----	213	1 072	1 046	1 158	1 084	999	14	12	9	13	12	13
1531	Operative builders -----	559	1 588	1 503	1 591	1 703	1 555	8	6	6	5	6	7
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	270	3 132	2 968	3 175	3 335	3 049	11	3	3	3	3	3
1542	Nonresidential buildings, n.e.c. ----	872	6 946	6 417	6 642	7 698	7 027	5	3	3	3	3	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	335	4 563	3 059	4 964	5 291	4 937	7	2	3	2	3	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	24	846	688	874	949	871	9	1	1	1	1	2
1623	Water, sewer, and utility lines -----	223	4 040	3 580	3 943	4 417	4 219	8	3	3	3	3	3
1629	Heavy construction, n.e.c. -----	358	5 344	4 715	5 887	5 541	5 233	8	3	2	3	3	3
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	3 031	13 087	12 344	13 239	13 520	13 248	1	1	1	2	2	2
1721	Painting and paper hanging -----	1 049	3 523	2 586	3 633	4 300	3 572	3	4	4	4	4	4
1731	Electrical work -----	2 323	12 057	12 025	11 638	12 491	12 076	2	1	1	1	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	903	3 710	3 000	3 675	4 169	3 998	4	5	6	5	6	5
1742	Plastering, drywall, and insulation work -----	436	4 240	4 335	4 454	4 415	3 758	5	5	3	5	5	6
1743	Terrazzo, tile, marble, and mosaic work -----	207	636	572	641	683	648	10	9	9	9	8	9
175	Carpentry and floor work:												
1751	Carpentry -----	1 558	4 173	3 895	4 283	4 430	4 085	4	4	4	4	5	4
1752	Floor laying and other floor work --	318	1 231	1 194	1 258	1 318	1 153	6	5	5	5	5	4
1761	Roofing, siding, and sheet metal work -----	1 024	4 542	3 881	4 600	5 104	4 581	4	3	3	4	4	3
1771	Concrete work -----	585	3 194	2 394	3 425	3 720	3 238	6	5	5	4	5	5
1781	Water well drilling -----	75	374	362	374	382	377	14	6	5	6	6	5
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	131	2 326	2 350	2 371	2 271	2 313	10	6	8	8	3	5
1793	Glass and glazing work -----	156	737	742	705	762	737	9	9	8	10	8	10
1794	Excavation work -----	463	1 773	1 464	1 801	1 919	1 908	7	6	7	6	6	7
1795	Wrecking and demolition work -----	37	601	545	606	658	594	5	5	3	3	5	7
1796	Installing building equipment, n.e.c. -----	138	2 015	1 971	1 983	2 062	2 044	6	1	1	1	1	1
1799	Special trade contractors, n.e.c. ----	963	5 768	5 291	6 106	6 362	5 311	6	4	4	4	4	4

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	6.7	30.5	166.3	.243	.298	.215	.267	.015
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.0	19.7	151.0	.176	.350	.251	.057	.009
1522	Other residential buildings -----	6.7	31.2	232.9	.179	.287	.297	.086	.011
1531	Operative builders -----	7.3	30.2	927.4	.083	.261	.349	.003	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	16.1	29.6	211.1	.194	.203	.411	.067	.007
1542	Nonresidential buildings, n.e.c. -----	11.6	34.4	360.8	.139	.206	.498	.038	.009
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	16.9	36.9	189.1	.242	.330	.193	.223	.033
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	45.2	45.7	200.6	.287	.323	.139	.074	.037
1623	Water, sewer, and utility lines -----	22.3	40.2	170.5	.290	.265	.114	.163	.038
1629	Heavy construction, n.e.c. -----	19.6	39.0	193.4	.265	.256	.122	.219	.019
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	6.0	32.9	150.1	.304	.351	.126	.423	.015
1721	Painting and paper hanging -----	3.9	21.7	71.1	.358	.241	.072	.441	.022
1731	Electrical work -----	6.7	34.4	122.7	.363	.350	.040	.455	.013
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	4.9	22.4	90.2	.296	(D)	.095	.684	.015
1742	Plastering, drywall, and insulation work -----	11.7	32.7	104.9	.376	.284	.104	.877	.010
1743	Terrazzo, tile, marble, and mosaic work -----	3.8	29.4	123.2	.295	.338	(S)	.785	.018
175	Carpentry and floor work:								
1751	Carpentry -----	3.4	22.9	130.4	.224	.367	.180	.445	.014
1752	Floor laying and other floor work -----	5.1	26.2	124.0	.276	.403	.085	.605	.018
1761	Roofing, siding, and sheet metal work -----	5.6	26.9	113.3	.300	.354	.095	.433	.013
1771	Concrete work -----	6.5	26.9	105.7	.302	.401	.071	.548	.021
1781	Water well drilling -----	6.6	31.5	157.3	.263	.348	.101	.166	.013
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	21.7	29.9	115.2	.317	.258	.118	.440	.021
1793	Glass and glazing work -----	6.8	28.6	134.5	.307	.448	.043	.723	.025
1794	Excavation work -----	4.8	27.0	111.8	.302	.264	.105	.557	.038
1795	Wrecking and demolition work -----	20.4	25.3	126.1	.248	(D)	(S)	.475	.028
1796	Installing building equipment, n.e.c. -----	20.4	36.1	161.2	.313	.348	.089	.200	.015
1799	Special trade contractors, n.e.c. -----	7.8	24.6	98.9	.326	.331	.092	.328	.025

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work subcontracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA											
	Construction industries	42 350	293 351	9 218 472	37 414 756	28 282 143	18 392 725	10 662 353	9 132 613	369 395	(Z)	(Z)
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	7 113	21 794	432 130	2 472 841	1 798 370	985 496	848 216	674 471	20 780	2	3
1522	Other residential buildings	835	5 490	153 426	927 370	551 355	337 646	224 493	376 015	4 926	5	6
1531	Operative builders	1 018	6 282	181 447	2 108 389	1 398 163	896 224	583 977	710 226	10 621	4	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	473	6 777	228 107	1 478 248	721 385	485 489	256 717	756 863	6 091	3	3
1542	Nonresidential buildings, n.e.c.	2 184	25 875	942 296	6 760 487	2 879 876	1 837 012	1 345 434	3 880 610	31 176	2	1
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	648	11 541	420 833	1 779 832	1 448 854	921 211	565 867	330 978	42 479	2	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	78	4 397	198 889	823 663	632 063	445 470	199 490	191 600	10 308	1	1
1623	Water, sewer, and utility lines	466	9 358	355 962	1 249 484	1 065 185	789 931	296 065	184 299	27 771	2	2
1629	Heavy construction, n.e.c.	676	10 703	438 031	1 750 592	1 442 084	1 059 465	466 715	308 508	29 103	2	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	6 509	42 500	1 392 063	4 696 119	4 054 819	2 482 719	1 610 349	641 300	44 984	1	1
1721	Painting and paper hanging	2 460	11 826	280 880	750 105	701 211	534 363	171 438	48 895	9 868	3	2
1731	Electrical work	5 212	42 806	1 529 521	4 135 160	3 952 544	2 587 075	1 383 066	182 616	29 419	1	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	1 740	8 920	215 431	720 061	626 354	420 524	210 129	93 707	6 858	3	3
1742	Plastering, drywall, and insulation work	959	11 663	399 161	1 061 626	954 210	670 604	289 450	107 416	9 942	3	2
1743	Terrazzo, tile, marble, and mosaic work	560	2 518	72 380	227 457	212 009	135 777	78 384	15 448	2 410	8	7
175	Carpentry and floor work:											
1751	Carpentry	3 414	12 366	283 674	1 082 162	945 907	562 093	401 491	136 255	(S)	3	4
1752	Floor laying and other floor work	756	3 529	94 519	358 405	320 221	190 894	138 062	38 184	(S)	3	5
1761	Roofing, siding, and sheet metal work	1 817	10 839	307 237	976 792	882 317	563 423	324 331	94 475	12 679	2	2
1771	Concrete work	1 218	7 659	190 507	639 068	591 850	359 217	241 033	47 218	9 701	7	4
1781	Water well drilling	127	694	21 589	78 340	73 778	45 316	28 540	4 562	1 335	7	6
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	275	3 229	117 785	365 864	324 796	239 101	88 923	41 068	2 428	5	2
1793	Glass and glazing work	403	2 449	67 938	215 385	204 561	122 457	89 496	10 823	1 744	5	4
1794	Excavation work	926	4 876	140 467	476 199	427 018	302 804	134 726	49 181	20 201	4	5
1795	Wrecking and demolition work	90	1 668	38 783	141 649	126 897	106 930	23 890	14 752	1 945	2	3
1796	Installing building equipment, n.e.c.	339	7 802	311 525	841 241	792 198	565 583	228 917	49 042	4 371	1	(Z)
1799	Special trade contractors, n.e.c.	2 056	15 790	403 891	1 298 219	1 154 116	745 902	433 154	144 102	16 943	3	3
15,16, 17	Bergen–Passaic, NJ PMSA											
	Construction industries	3 805	27 827	877 468	3 341 538	2 675 177	1 825 453	968 390	666 362	32 405	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	594	1 654	28 842	(S)	(S)	(S)	(S)	(S)	1 048	8	(S)
1522	Other residential buildings	47	246	5 370	23 372	(S)	(S)	7 588	7 464	(S)	18	(S)
1531	Operative builders	94	425	15 899	167 953	109 088	61 949	48 027	58 865	475	19	25
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	83	2 229	57 390	295 396	179 512	121 056	62 219	115 884	2 437	3	3
1542	Nonresidential buildings, n.e.c.	246	1 895	67 319	395 798	182 185	118 697	78 322	213 613	2 538	7	7
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	1 563	60 332	218 157	171 901	105 540	67 283	46 256	5 958	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	4	153	4 061	12 559	(D)	(D)	5 592	(D)	471	(Z)	(D)
1623	Water, sewer, and utility lines	26	499	18 202	49 277	42 552	36 879	11 958	6 725	2 537	5	6
1629	Heavy construction, n.e.c.	(S)	3 513	147 936	512 251	469 847	(D)	114 448	42 403	3 238	1	1

NJ–14 NEW JERSEY

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	Bergen–Passaic, NJ PMSA—Con.											
	Construction industries—Con.											
	Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning	650	3 455	112 737	387 064	342 851	204 626	142 277	44 213	2 340	3	3
	1721 Painting and paper hanging	172	635	13 525	36 985	34 446	25 697	8 750	(S)	(D)	11	10
	1731 Electrical work	477	2 529	83 852	241 156	227 158	144 929	82 691	13 998	1 812	3	3
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work	177	839	19 186	59 824	55 486	36 572	18 916	4 338	99	10	10
	1742 Plastering, drywall, and insulation work	105	1 047	35 586	86 002	78 883	56 664	22 296	7 119	266	4	5
	1743 Terrazzo, tile, marble, and mosaic work	40	139	3 967	15 130	(D)	8 157	4 681	(D)	*351	14	(D)
	175 Carpentry and floor work:											
	1751 Carpentry	264	790	21 767	101 218	87 976	48 666	39 685	13 242	1 379	10	16
	1752 Floor laying and other floor work	66	464	15 269	56 765	51 938	28 765	23 230	4 827	193	10	8
	1761 Roofing, siding, and sheet metal work	154	1 241	35 579	114 445	108 268	67 392	40 876	6 177	1 611	5	6
	1771 Concrete work	86	587	19 356	64 591	60 782	29 851	30 978	3 809	714	9	7
	1781 Water well drilling	(S)	(S)	1 002	(S)	(D)	(D)	(S)	(D)	(D)	(S)	(D)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection	27	363	10 091	22 972	(D)	13 803	5 351	(D)	357	15	(D)
	1793 Glass and glazing work	41	289	7 681	26 770	25 311	15 045	11 123	1 459	(S)	14	14
	1794 Excavation work	57	251	6 929	23 222	21 044	12 217	8 827	2 178	477	15	17
	1795 Wrecking and demolition work	11	293	8 246	32 592	30 292	25 370	7 722	2 300	*924	10	13
	1796 Installing building equipment, n.e.c.	37	535	20 037	61 027	58 095	47 173	10 940	2 932	608	2	2
	1799 Special trade contractors, n.e.c.	212	2 155	57 309	174 511	150 674	97 272	55 970	23 838	2 013	5	3
	Bridgeport, CT PMSA											
	Construction industries	1 032	5 940	178 098	698 909	529 942	347 931	194 890	168 967	8 091	3	3
	(See appropriate State for SIC detail.)											
	Danbury, CT PMSA											
	Construction industries	710	3 255	98 901	453 931	324 836	195 875	133 634	129 095	6 059	4	4
	(See appropriate State for SIC detail.)											
	Dutchess County, NY PMSA											
	Construction industries	742	4 096	114 520	489 015	375 227	231 309	156 061	113 789	6 023	5	6
	(See appropriate State for SIC detail.)											
	Jersey City, NJ PMSA											
	Construction industries	776	5 896	188 387	674 560	558 706	369 589	196 350	115 854	5 989	3	4
15	Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses	(S)	(S)	(S)	(S)	(S)	23 570	(S)	(S)	(S)	(S)	(S)
	1522 Other residential buildings	33	76	2 175	13 092	10 121	6 283	3 911	2 970	(D)	31	19
	1531 Operative builders	7	(S)	(S)	(S)	(S)	(S)	(S)	(S)	*247	(S)	(S)
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses	5	(D)	(D)	(D)	(D)	(S)	(D)	(D)	(D)	(D)	(D)
	1542 Nonresidential buildings, n.e.c.	54	(S)	(S)	(S)	(S)	(S)	(S)	46 795	636	(S)	(S)
	16 Heavy construction other than building construction—contractors:											
	1611 Highway and street construction	*17	461	(D)	(D)	40 800	28 496	12 311	(D)	(D)	9	6
162	162 Heavy construction, except highway:											
	1622 Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1623 Water, sewer, and utility lines	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1629 Heavy construction, n.e.c.	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

NEW JERSEY NJ-15

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	Jersey City, NJ PMSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	136	(S)	(S)	110 049	96 211	65 654	(S)	13 839	(S)	(S)	6
1721	Painting and paper hanging	(S)	371	5 136	12 758	12 675	9 639	3 037	(S)	(D)	10	14
1731	Electrical work	126	647	16 282	45 590	43 563	26 159	17 855	2 027	(D)	17	14
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	(S)	(S)	13 312	(S)	(S)	(S)	*2 794	(D)	(S)	(S)
1742	Plastering, drywall, and insulation work	*18	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1743	Terrazzo, tile, marble, and mosaic work	(S)	(D)	(D)	(D)	(D)	(D)	268	(D)	—	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	60	191	4 675	19 645	16 773	10 627	6 782	(S)	(S)	26	32
1752	Floor laying and other floor work	(S)	(S)	2 676	(S)	(D)	4 159	(S)	(D)	(D)	(S)	(D)
1761	Roofing, siding, and sheet metal work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1771	Concrete work	31	177	5 332	13 612	12 193	9 212	(S)	*1 419	57	22	14
1781	Water well drilling	—	—	—	—	—	—	—	—	—	—	—
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	(D)	(S)	(D)	(D)	(D)	(S)	(D)	(D)	(D)	(D)
1793	Glass and glazing work	7	(D)	2 708	(D)	(D)	4 765	(D)	(D)	(D)	(D)	(D)
1794	Excavation work	5	105	2 562	(D)	(D)	5 339	2 489	(D)	48	(Z)	(D)
1795	Wrecking and demolition work	4	30	703	2 225	(D)	1 989	214	(D)	(D)	18	(D)
1796	Installing building equipment, n.e.c.	9	250	12 024	(D)	(D)	13 513	(D)	(D)	157	(Z)	(D)
1799	Special trade contractors, n.e.c.	46	373	10 002	42 515	41 218	30 405	11 213	1 297	499	13	24
	Middlesex–Somerset–Hunterdon, NJ PMSA											
15,16, 17	Construction industries	2 765	19 015	604 438	2 620 186	2 000 280	1 247 470	789 895	619 906	29 971	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	492	1 367	26 886	123 262	(S)	(S)	(S)	27 591	(S)	10	(S)
1522	Other residential buildings	*24	(S)	2 574	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
1531	Operative builders	93	553	16 299	237 552	163 696	92 572	79 161	73 856	1 051	10	17
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	39	517	21 564	120 995	61 814	45 756	16 058	59 181	239	10	7
1542	Nonresidential buildings, n.e.c.	89	1 433	50 994	446 762	183 095	103 979	89 019	263 667	915	9	9
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	66	978	39 664	168 488	139 891	94 339	47 051	28 597	7 320	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	3	75	3 676	18 169	(D)	9 316	5 713	(D)	(D)	(Z)	(D)
1623	Water, sewer, and utility lines	(S)	714	26 229	132 880	115 032	71 573	44 676	17 848	3 418	5	4
1629	Heavy construction, n.e.c.	44	656	20 170	84 632	69 086	48 532	21 246	15 547	(S)	6	9
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	423	2 750	96 052	279 565	250 654	160 282	94 255	28 911	2 861	3	3
1721	Painting and paper hanging	154	690	17 148	40 462	37 494	31 767	8 474	2 968	897	10	6
1731	Electrical work	299	1 847	61 778	156 690	154 047	102 765	51 834	2 643	1 755	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	135	870	22 437	75 347	68 971	44 908	25 136	6 376	797	14	8
1742	Plastering, drywall, and insulation work	54	1 036	35 112	92 047	81 013	57 901	23 160	11 034	860	4	3
1743	Terrazzo, tile, marble, and mosaic work	(S)	71	1 699	6 615	(D)	2 933	2 933	(D)	(S)	23	(D)
175	Carpentry and floor work:											
1751	Carpentry	215	(S)	(S)	119 557	101 838	(S)	51 613	*17 719	(S)	(S)	18
1752	Floor laying and other floor work	(S)	95	2 333	12 519	11 589	5 417	6 176	930	88	16	21

NJ–16 NEW JERSEY

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	Middlesex–Somerset–Hunterdon, NJ PMSA—Con.											
15,16, 17	Construction industries—Con.											
17	Special trade contractors—Con.											
1761	Roofing, siding, and sheet metal work	126	699	18 375	55 779	51 897	29 335	22 649	3 883	508	9	8
1771	Concrete work	(S)	627	16 041	50 445	46 334	28 328	18 014	4 112	663	12	11
1781	Water well drilling	7	73	2 657	9 382	(D)	5 124	4 052	(D)	(D)	(Z)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	12	532	22 973	103 988	(D)	66 994	26 245	(D)	491	(Z)	(D)
1793	Glass and glazing work	25	144	4 468	10 806	(D)	6 632	5 674	(D)	55	29	(D)
1794	Excavation work	93	478	13 890	46 455	40 304	31 776	10 151	6 151	2 529	16	16
1795	Wrecking and demolition work	4	114	(S)	(S)	(D)	(S)	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c. ..	17	540	26 082	127 626	(D)	42 051	(D)	(D)	202	(Z)	(D)
1799	Special trade contractors, n.e.c.	160	1 050	25 489	75 506	70 179	49 925	22 252	5 327	1 143	13	12
	Monmouth–Ocean, NJ PMSA											
15,16, 17	Construction industries	2 725	15 377	418 295	2 128 055	1 594 996	1 004 473	631 216	533 059	25 342	2	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	559	1 487	28 008	175 380	126 473	65 702	61 742	48 907	1 117	9	7
1522	Other residential buildings	*15	*49	2 150	*15 345	*8 305	2 523	(S)	7 040	*640	61	67
1531	Operative builders	118	1 741	48 882	576 991	375 186	262 865	125 838	201 805	(D)	6	9
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	365	12 348	73 972	(D)	22 092	16 234	(D)	405	9	(D)
1542	Nonresidential buildings, n.e.c.	118	957	30 927	210 411	95 230	58 449	39 536	115 181	1 233	8	7
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	684	20 345	107 442	82 383	46 129	40 095	25 059	1 264	9	12
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	45	889	37 297	132 778	121 093	84 416	37 584	11 686	2 676	13	6
1629	Heavy construction, n.e.c.	44	332	9 699	42 512	37 266	23 677	13 799	5 246	3 216	17	11
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	427	2 185	60 675	229 542	195 829	108 617	94 758	33 713	1 956	5	5
1721	Painting and paper hanging	142	365	6 677	25 488	24 348	17 632	7 025	1 140	633	13	16
1731	Electrical work	325	1 585	46 501	143 227	138 871	84 245	55 278	4 356	(S)	5	5
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	101	583	10 298	38 101	36 448	23 682	12 766	1 653	366	16	15
1742	Plastering, drywall, and insulation work	68	747	21 447	69 359	58 817	43 529	17 230	*10 541	806	26	30
1743	Terrazzo, tile, marble, and mosaic work	16	40	1 250	4 258	(D)	(S)	1 852	(D)	(D)	(Z)	(D)
175	Carpentry and floor work:											
1751	Carpentry	191	522	9 456	44 781	36 747	21 047	16 106	(S)	(S)	14	15
1752	Floor laying and other floor work ..	(S)	189	5 355	15 219	14 951	9 485	5 579	267	156	11	7
1761	Roofing, siding, and sheet metal work	153	725	17 543	62 324	52 191	33 690	18 511	*10 133	281	14	15
1771	Concrete work	62	293	(D)	20 615	19 414	10 115	9 310	(S)	(S)	25	19
1781	Water well drilling	7	(D)	880	3 744	(D)	2 316	1 352	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	20	179	(D)	(D)	(D)	10 193	(D)	(D)	*69	6	(D)
1793	Glass and glazing work	*19	*97	*1 214	(D)	(D)	2 329	(D)	(D)	(S)	52	(D)
1794	Excavation work	65	323	8 109	26 857	24 948	17 940	7 843	1 909	1 197	15	18
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1796	Installing building equipment, n.e.c. ..	(S)	(D)	(S)	4 312	4 262	(D)	1 098	(S)	(S)	(D)	(Z)
1799	Special trade contractors, n.e.c.	(S)	718	16 506	50 629	44 533	30 326	18 048	(S)	1 479	15	14
	Nassau–Suffolk, NY PMSA											
15,16, 17	Construction industries	8 068	44 952	1 224 727	4 994 826	3 872 198	2 440 215	1 491 173	1 122 629	54 762	1	1

(See appropriate State for SIC detail.)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

NEW JERSEY NJ–17

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16,17	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.											
	New Haven—Meriden, CT PMSA											
	Construction industries	1 351	9 080	282 141	1 101 261	864 400	532 933	350 990	236 861	(S)	3	2
	(See appropriate State for SIC detail.)											
15,16,17	New York, NY PMSA											
	Construction industries	12 358	109 208	3 729 636	14 477 032	10 612 957	7 104 953	3 877 610	3 864 074	119 089	1	1
	(See appropriate State for SIC detail.)											
15,16,17	Newark, NJ PMSA											
	Construction industries	4 737	30 728	994 606	3 889 810	3 123 797	2 026 165	1 151 210	766 012	46 706	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	742	2 479	49 637	290 107	218 906	124 892	97 136	71 201	2 777	8	8
1522	Other residential buildings	36	505	21 663	125 515	91 545	59 632	33 567	33 970	(D)	9	14
1531	Operative builders	116	(S)	14 328	155 959	112 309	69 346	(S)	43 650	343	(S)	22
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	58	703	22 194	86 580	(D)	36 860	23 138	(D)	(S)	6	(D)
1542	Nonresidential buildings, n.e.c.	224	2 653	102 345	743 543	414 446	282 235	152 136	329 097	3 788	5	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	107	1 036	36 109	169 228	136 667	81 464	58 465	32 560	3 061	8	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	(S)	(S)	20 105	17 512	(S)	9 759	(S)	(S)	(S)	11
1623	Water, sewer, and utility lines	56	1 392	53 980	172 391	152 553	115 130	38 685	19 838	(S)	5	7
1629	Heavy construction, n.e.c.	82	897	38 334	169 351	146 281	95 433	53 234	23 070	5 131	8	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	677	4 504	163 262	527 874	453 277	283 113	170 962	74 597	6 232	2	2
1721	Painting and paper hanging	277	1 129	27 546	80 093	74 267	52 877	21 426	5 826	1 359	8	6
1731	Electrical work	560	5 476	212 667	546 264	521 914	342 469	181 495	24 350	5 241	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	241	912	16 924	67 602	54 189	35 670	18 564	13 413	691	11	11
1742	Plastering, drywall, and insulation work	92	844	29 494	75 217	67 182	46 869	20 563	8 036	(D)	7	4
1743	Terrazzo, tile, marble, and mosaic work	73	288	9 388	26 971	25 425	16 204	9 222	1 546	193	22	22
175	Carpentry and floor work:											
1751	Carpentry	460	1 153	24 541	96 248	86 158	52 806	33 838	10 089	(S)	8	8
1752	Floor laying and other floor work	(S)	482	10 707	(S)	(S)	20 744	(S)	(S)	(S)	9	(S)
1761	Roofing, siding, and sheet metal work	256	1 242	32 965	111 991	99 588	59 843	39 749	12 402	(S)	8	7
1771	Concrete work	125	746	22 986	79 629	75 442	47 799	29 761	4 187	2 505	10	11
1781	Water well drilling	20	129	5 489	23 670	(D)	13 290	7 635	(D)	(D)	12	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	22	444	10 519	26 650	24 022	19 385	4 772	2 628	252	31	8
1793	Glass and glazing work	38	229	8 887	30 736	28 574	16 445	12 371	2 163	(D)	9	8
1794	Excavation work	127	466	13 581	41 715	38 860	28 624	10 538	2 855	3 313	17	12
1795	Wrecking and demolition work	9	109	2 846	10 562	9 964	8 880	1 359	598	(D)	(Z)	(Z)
1796	Installing building equipment, n.e.c.	32	836	18 676	48 931	(D)	36 200	10 740	(D)	96	3	(D)
1799	Special trade contractors, n.e.c.	229	1 386	39 694	125 167	113 682	72 202	45 956	11 484	(S)	9	8
15,16,17	Newburgh, NY—PA PMSA											
	Construction industries	1 035	3 891	101 839	415 465	350 342	206 446	146 555	65 123	6 561	3	4
	(See appropriate State for SIC detail.)											
15,16,17	Stamford—Norwalk, CT PMSA											
	Construction industries	987	6 211	183 104	1 076 075	620 111	355 313	276 985	455 964	(S)	2	3
	(See appropriate State for SIC detail.)											

NJ—18 NEW JERSEY

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	Trenton, NJ PMSA											
15,16, 17	Construction industries	691	4 984	137 822	746 410	524 888	345 956	195 957	221 522	5 847	2	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	118	344	8 704	41 369	31 495	18 982	12 880	9 874	206	17	18
1522	Other residential buildings	*11	44	825	5 800	(D)	(D)	1 492	(D)	—	17	(D)
1531	Operative builders	21	165	5 044	78 911	45 886	30 873	15 595	33 025	(S)	6	2
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	*14	*75	*1 767	*14 695	*9 086	(D)	*3 153	*5 609	—	55	57
1542	Nonresidential buildings, n.e.c.	29	952	25 112	309 214	161 601	106 720	68 049	147 613	526	5	1
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	*917	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	6	(D)	(D)	12 574	12 272	9 856	2 416	302	(D)	(D)	14
1629	Heavy construction, n.e.c.	11	(D)	4 033	14 192	12 702	(D)	3 265	1 490	(D)	(D)	5
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	(S)	721	20 794	68 339	61 872	35 816	26 079	6 466	(S)	11	5
1721	Painting and paper hanging	40	116	1 855	5 267	4 678	3 705	973	*589	*22	15	11
1731	Electrical work	104	654	21 087	59 604	57 738	35 113	22 976	1 865	678	4	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	18	47	1 152	2 990	2 848	1 946	(D)	(S)	(D)	18	21
1742	Plastering, drywall, and insulation work	20	276	8 340	23 177	19 189	12 725	6 496	3 988	86	12	9
1743	Terrazzo, tile, marble, and mosaic work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(S)
175	Carpentry and floor work:											
1751	Carpentry	49	268	5 241	21 373	17 273	11 573	5 970	(S)	338	23	12
1752	Floor laying and other floor work	(S)	20	315	(D)	(D)	675	411	(S)	—	(Z)	(D)
1761	Roofing, siding, and sheet metal work	35	204	5 801	19 956	19 001	11 688	7 313	955	(S)	8	9
1771	Concrete work	(S)	(S)	(D)	(S)	(D)	(S)	(S)	(D)	(S)	(S)	(D)
1781	Water well drilling	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	4	36	1 555	3 201	3 201	2 368	833	—	(D)	(Z)	(Z)
1793	Glass and glazing work	3	23	(D)	(D)	(D)	(D)	483	(D)	(D)	(Z)	(D)
1794	Excavation work	(S)	(S)	723	(S)	(S)	2 026	(S)	133	139	(S)	(S)
1795	Wrecking and demolition work	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c.	6	129	5 637	11 776	11 709	9 656	2 053	67	(D)	(Z)	(Z)
1799	Special trade contractors, n.e.c.	(S)	247	5 408	(D)	(D)	10 642	4 147	(D)	*139	15	(D)
	Waterbury, CT PMSA											
15,16, 17	Construction industries	569	2 891	84 490	307 681	254 285	158 646	101 436	53 396	4 683	6	6

(See appropriate State for SIC detail.)

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA											
	Construction industries	13 010	105 943	3 072 558	12 663 461	9 443 230	6 052 455	3 736 651	3 220 232	163 018	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	2 309	8 868	182 063	1 032 402	732 371	377 108	369 480	300 031	7 495	3	4
1522	Other residential buildings	97	1 003	29 588	139 771	82 251	57 972	27 975	57 520	499	13	10
1531	Operative builders	366	2 767	77 295	985 023	632 627	419 108	278 463	352 396	5 653	4	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	165	2 943	100 243	449 964	246 674	194 050	61 968	203 290	3 201	5	7
1542	Nonresidential buildings, n.e.c.	589	7 924	272 380	2 114 457	746 560	474 380	373 287	1 367 897	6 458	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	175	4 978	161 333	787 298	643 901	401 973	274 208	143 396	25 540	2	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	25	437	21 230	99 544	63 031	47 054	17 364	36 513	939	7	4
1623	Water, sewer, and utility lines	168	5 868	211 645	587 661	525 255	389 636	138 175	62 406	21 085	2	2
1629	Heavy construction, n.e.c.	226	3 526	126 055	527 677	419 197	285 302	150 112	108 480	16 971	5	3
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 828	16 046	510 888	1 681 450	1 441 079	849 431	629 554	240 371	17 100	2	2
1721	Painting and paper hanging	736	3 720	83 383	215 610	202 389	147 992	54 856	13 221	2 282	5	3
1731	Electrical work	1 346	11 310	372 617	1 078 973	1 036 199	670 112	381 387	42 774	12 375	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	639	4 460	110 528	307 555	292 198	194 808	97 827	15 357	3 402	4	4
1742	Plastering, drywall, and insulation work	281	2 746	76 553	221 158	199 875	129 583	73 567	21 284	1 451	4	5
1743	Terrazzo, tile, marble, and mosaic work	135	689	21 628	66 679	(D)	38 736	23 791	(D)	613	6	(D)
175	Carpentry and floor work:											
1751	Carpentry	986	4 346	93 612	361 174	289 994	173 571	118 488	71 180	3 280	5	7
1752	Floor laying and other floor work	263	1 166	28 190	114 342	104 567	53 392	56 511	9 775	999	7	5
1761	Roofing, siding, and sheet metal work	761	4 776	122 776	422 154	385 206	240 706	147 007	36 948	3 285	4	4
1771	Concrete work	672	4 801	112 339	391 724	354 987	211 219	147 824	36 738	7 322	4	4
1781	Water well drilling	45	316	8 685	30 873	(D)	17 797	9 789	(D)	432	7	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	89	1 974	51 920	158 925	138 188	93 524	48 807	20 737	2 078	2	2
1793	Glass and glazing work	110	866	24 974	91 016	86 079	49 478	41 391	4 937	307	9	8
1794	Excavation work	327	1 758	47 872	178 380	152 688	101 472	54 614	25 692	6 055	5	5
1795	Wrecking and demolition work	22	509	14 647	48 788	46 464	37 872	11 275	2 323	994	9	6
1796	Installing building equipment, n.e.c.	83	2 518	78 817	210 002	199 795	159 027	45 521	10 207	1 938	2	2
1799	Special trade contractors, n.e.c.	568	5 628	131 296	360 864	331 742	237 151	103 409	29 121	11 264	4	4
15,16, 17	Atlantic–Cape May, NJ PMSA											
	Construction industries	1 032	6 001	176 618	722 675	591 515	367 391	239 927	131 160	7 973	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	211	790	17 560	118 510	78 172	35 372	43 109	40 338	1 146	11	13
1522	Other residential buildings	(S)	146	5 200	29 846	(D)	13 354	5 802	(D)	—	13	(D)
1531	Operative builders	41	103	1 659	27 312	23 707	18 763	5 004	3 605	(D)	28	31
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	*8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1542	Nonresidential buildings, n.e.c.	29	277	9 206	50 917	26 648	18 395	8 342	24 269	*376	14	9
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	10	(D)	11 786	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	13	295	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1629	Heavy construction, n.e.c.	17	(D)	(D)	36 352	27 939	21 241	11 438	8 413	(D)	(D)	3

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.											
	Atlantic–Cape May, NJ PMSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	152	851	24 171	77 666	70 859	41 705	30 069	(S)	807	7	4
1721	Painting and paper hanging	71	(S)	4 435	11 740	10 694	7 930	2 764	(S)	281	(S)	10
1731	Electrical work	110	777	26 040	85 777	85 221	52 678	32 786	556	(D)	5	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	43	214	4 940	17 243	16 955	10 915	6 040	*288	(S)	11	6
1742	Plastering, drywall, and insulation work	17	146	4 100	10 195	(D)	6 520	(D)	(D)	(D)	9	(D)
1743	Terrazzo, tile, marble, and mosaic work	(S)	(S)	(D)	(D)	(D)	(D)	(S)	(D)	(D)	(S)	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	288	5 994	22 382	20 195	11 197	9 020	*2 187	121	5	8
1752	Floor laying and other floor work	(S)	41	639	(D)	(D)	(S)	1 548	(D)	(D)	10	(D)
1761	Roofing, siding, and sheet metal work	63	302	7 695	22 203	21 323	14 001	7 322	880	87	7	6
1771	Concrete work	29	225	5 938	23 203	(D)	9 186	10 344	(D)	*154	11	(D)
1781	Water well drilling	6	31	*731	*2 991	*2 880	*1 810	(D)	*111	(D)	34	41
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1793	Glass and glazing work	10	69	1 775	(D)	(D)	(D)	(D)	(D)	*56	3	(D)
1794	Excavation work	(S)	(S)	1 920	(D)	(D)	4 962	1 436	(D)	(S)	(S)	(D)
1795	Wrecking and demolition work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(D)
1796	Installing building equipment, n.e.c.	6	133	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c.	(S)	221	5 249	(D)	(D)	12 949	7 259	(D)	103	22	(D)
	Philadelphia, PA–NJ PMSA											
15,16,17	Construction industries	10 203	84 254	2 477 200	10 256 615	7 564 572	4 872 495	2 991 358	2 692 042	128 446	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 757	6 743	135 123	777 659	555 636	288 529	280 299	222 024	4 886	4	5
1522	Other residential buildings	73	650	(S)	95 046	56 963	36 998	20 800	38 083	(D)	20	14
1531	Operative builders	272	2 139	64 152	809 734	511 808	339 033	233 120	297 927	4 998	5	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	121	2 151	74 362	340 955	189 624	151 469	41 585	151 332	2 288	5	9
1542	Nonresidential buildings, n.e.c.	476	6 594	232 019	1 821 752	604 375	387 651	311 457	1 217 378	5 394	2	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	131	3 291	107 824	525 647	424 446	272 402	176 453	101 201	13 726	3	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	14	(D)	10 827	65 458	34 933	26 375	8 579	30 525	446	(D)	2
1623	Water, sewer, and utility lines	132	4 272	155 204	436 357	395 587	293 959	104 016	40 771	18 391	3	2
1629	Heavy construction, n.e.c.	187	3 123	112 524	472 894	375 595	252 814	133 843	97 299	15 779	6	3
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 504	12 990	424 811	1 399 531	1 200 386	700 218	533 334	199 145	14 130	2	2
1721	Painting and paper hanging	538	2 948	68 745	179 390	168 791	121 910	47 282	10 599	1 596	5	4
1731	Electrical work	1 079	9 170	304 542	873 198	835 096	545 676	303 721	38 103	10 192	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	499	3 517	90 200	246 781	232 816	155 819	77 330	13 964	2 535	5	5
1742	Plastering, drywall, and insulation work	214	2 206	63 391	186 516	167 660	109 489	60 532	18 856	1 175	5	5
1743	Terrazzo, tile, marble, and mosaic work	(S)	492	15 912	44 831	44 314	26 911	17 570	517	270	8	6
175	Carpentry and floor work:											
1751	Carpentry	788	3 505	78 888	306 136	242 050	146 864	97 030	64 086	2 761	6	9
1752	Floor laying and other floor work	206	976	24 145	96 705	(D)	45 836	47 655	(D)	870	8	(D)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

NEW JERSEY NJ-21

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.											
	Philadelphia, PA–NJ PMSA—Con.											
15,16, 17	Construction industries—Con.											
1761	Special trade contractors—Con.											
	Roofing, siding, and sheet metal work	608	3 816	97 174	350 260	316 233	197 949	120 353	34 027	2 730	5	4
1771	Concrete work	523	3 780	91 333	321 275	292 837	175 154	121 273	28 438	6 368	4	4
1781	Water well drilling	33	258	(D)	(D)	(D)	(D)	(D)	(D)	(D)	7	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	63	1 594	39 060	117 609	(D)	73 583	34 535	(D)	1 594	3	(D)
1793	Glass and glazing work	80	726	21 208	79 470	74 586	43 130	35 722	4 884	251	9	9
1794	Excavation work	268	1 383	37 590	136 842	116 606	79 856	39 947	20 235	4 749	7	6
1795	Wrecking and demolition work	19	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. .	69	2 301	72 438	192 216	(D)	146 065	40 966	(D)	1 837	2	(D)
1799	Special trade contractors, n.e.c.	450	4 930	115 069	309 844	283 527	204 195	86 428	26 317	10 592	4	4
	Vineland–Millville–Bridgeton, NJ PMSA											
15,16, 17	Construction industries	311	1 891	52 851	224 524	178 191	115 784	65 657	46 332	(S)	4	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	(S)	(S)	(S)	9 149	4 636	(S)	(S)	(S)	(S)	12
1522	Other residential buildings	*2	*5	*110	*644	(D)	(D)	*214	(D)	—	63	(D)
1531	Operative builders	5	(S)	(S)	*3 206	*2 710	*1 606	(S)	*496	(D)	(S)	54
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	*6	69	2 453	14 330	(D)	7 506	(D)	(D)	(D)	18	(D)
1542	Nonresidential buildings, n.e.c.	12	258	8 117	38 311	21 176	13 710	7 618	17 135	140	6	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	(D)	3 996	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	4	58	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1629	Heavy construction, n.e.c.	(S)	(D)	(D)	(D)	(D)	(S)	(D)	(D)	(D)	(D)	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	26	318	11 078	46 784	36 208	21 466	15 468	10 575	391	13	7
1721	Painting and paper hanging	23	76	1 443	3 714	3 591	2 749	847	123	(D)	9	8
1731	Electrical work	27	(S)	(S)	24 373	23 614	13 957	9 662	(S)	(D)	(S)	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	82	(S)	4 250	4 084	2 992	1 196	(S)	(S)	4	9
1742	Plastering, drywall, and insulation work	(S)	(S)	(S)	(S)	(D)	(S)	(D)	(D)	(D)	(S)	(D)
1743	Terrazzo, tile, marble, and mosaic work	10	(D)	(D)	2 784	2 736	(D)	1 065	(S)	34	(D)	(Z)
175	Carpentry and floor work:											
1751	Carpentry	(S)	86	1 314	6 931	5 907	3 816	2 092	1 024	119	21	23
1752	Floor laying and other floor work	(S)	16	194	(D)	959	645	319	(D)	(D)	(Z)	(Z)
1761	Roofing, siding, and sheet metal work	(S)	69	1 720	5 351	5 143	3 161	2 015	208	*76	14	23
1771	Concrete work	24	*116	*2 372	*9 151	(D)	*5 622	*3 216	(D)	*58	52	(D)
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	52	1 767	(D)	7 164	4 562	2 602	(D)	(D)	(Z)	(Z)
1793	Glass and glazing work	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work	9	38	1 126	(D)	(D)	2 355	924	(D)	(S)	13	(D)
1795	Wrecking and demolition work	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. .	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	(S)	(S)	(S)	(D)	(D)	(S)	(S)	(D)	(S)	(S)	(D)

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.											
	Wilmington–Newark, DE–MD PMSA											
	Construction industries ----- (See appropriate State for SIC detail.)	1 464	13 797	365 890	1 459 648	1 108 951	696 784	439 709	350 697	23 149	1	1

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Statistics for Establishments With Payroll

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for New York. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 108,270 establishments in this State operating in the construction industries. These establishments accounted for \$33.7 billion in total dollar value of business done.

Most of the 108,270 construction establishments were small. Of the total, 71,720 were nonemployers, and over half of the employer establishments had less than 5 employees. The 12,319 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 80 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$31.3 billion in total dollar value of business done. Of this amount, \$30.7 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$7.5 billion, leaving net value of construction work of \$23.3 billion. In addition, these establishments paid out \$10.0 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$14.8 billion. (See Introduction and appendixes for explanation of terms.)

There were 36,550 establishments with total employment averaging 257,391 during the year. Total payroll for 1992 was \$7.6 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 71,720 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$2.3 billion. Most of these establishments, about 80 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

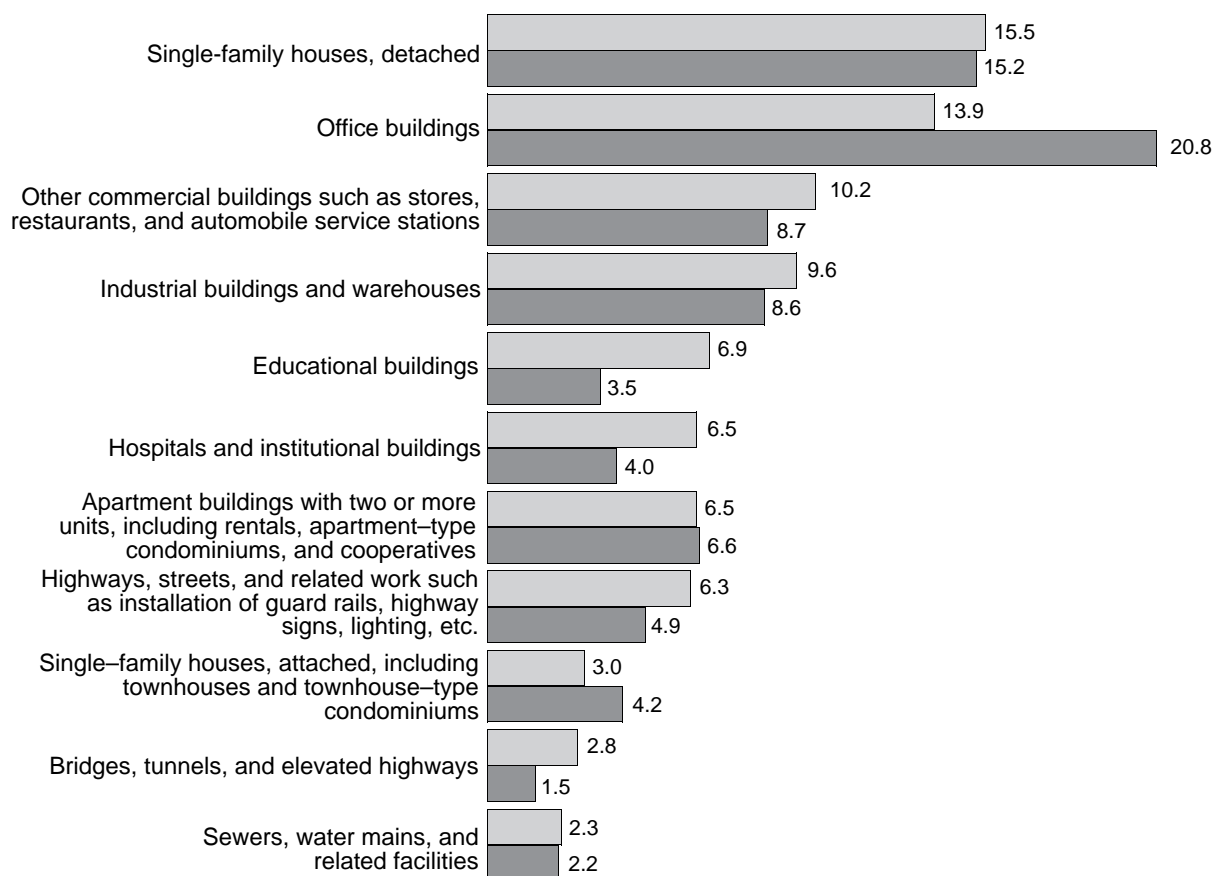




Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

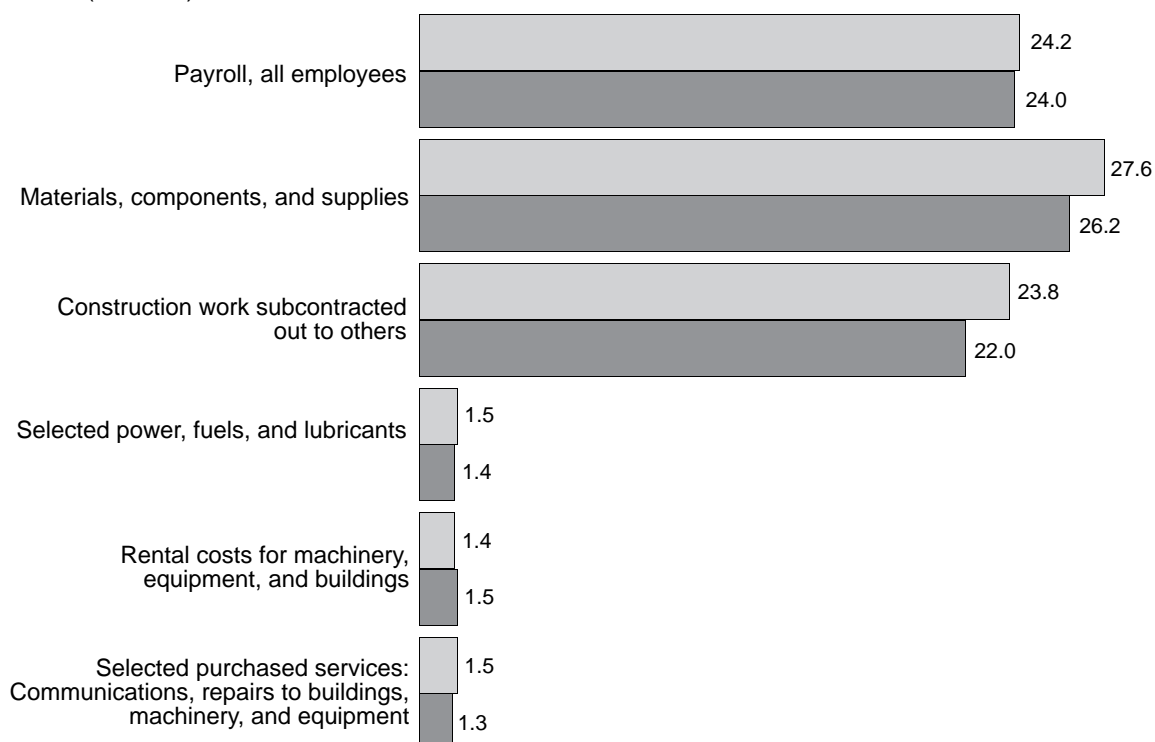


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	108 270	76 999	257 391	33 690 533	71 720	67 290	2 341 927	36 550	9 709	257 391	31 348 606	(Z)	(Z)
15	Building construction—General contractors and operative builders ----	23 867	13 654	57 724	12 154 787	13 317	10 897	856 279	10 550	2 757	57 724	11 298 508	1	1
16	Heavy construction other than building construction—contractors -----	2 553	963	30 063	4 582 115	724	627	30 863	1 829	336	30 063	4 551 252	1	1
17	Special trade contractors -----	81 850	62 381	169 604	16 953 632	57 679	55 766	1 454 785	24 171	6 615	169 604	15 498 847	1	1
1711	Plumbing, heating, and air-conditioning --	10 236	5 802	37 160	4 258 345	5 210	4 866	185 568	5 026	936	37 160	4 072 777	1	1
1731	Electrical work-----	8 461	4 890	35 867	3 566 430	4 563	4 236	108 838	3 898	654	35 867	3 457 592	1	1
	1987													
15, 16, 17	Construction industries² -----	104 913	71 412	326 979	38 961 146	68 036	64 942	4 289 938	36 877	6 470	326 979	34 671 208	(Z)	1
15	Building construction—General contractors and operative builders ----	25 546	14 108	80 421	14 824 996	14 482	12 369	1 458 061	11 064	1 739	80 421	13 366 935	1	1
16	Heavy construction other than building construction—contractors -----	2 185	742	33 186	4 045 853	547	487	83 537	1 638	255	33 186	3 962 316	1	1
17	Special trade contractors -----	75 490	55 643	211 276	18 988 213	51 794	51 211	1 928 396	23 696	4 432	211 276	17 059 817	1	(Z)
1711	Plumbing, heating, and air-conditioning --	9 210	5 090	42 058	4 234 523	4 570	4 432	244 840	4 640	658	42 058	3 989 683	1	1
1731	Electrical work-----	7 528	4 359	45 658	3 975 944	3 929	3 809	147 625	3 599	550	45 658	3 828 319	1	1

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	36 550	257 391	193 972	7 572 256	5 308 972	30 716 613	23 250 658	14 768 059
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	6 638	20 907	15 309	385 146	269 085	2 185 871	1 617 622	855 481
1522	Other residential buildings -----	791	5 273	3 721	134 785	81 135	830 709	482 065	277 090
1531	Operative builders -----	828	4 228	1 995	122 446	44 212	1 318 436	843 844	485 367
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	411	4 767	3 268	164 576	101 526	1 020 051	497 458	325 880
1542	Nonresidential buildings, n.e.c. -----	1 883	22 550	14 981	790 218	456 267	5 563 580	2 296 448	1 465 237
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	536	10 744	8 563	377 271	281 816	1 650 334	1 374 730	862 025
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	96	4 232	3 462	184 300	137 555	760 910	565 471	387 577
1623	Water, sewer, and utility lines -----	455	7 766	6 193	269 170	206 139	922 895	815 585	597 590
1629	Heavy construction, n.e.c. -----	742	7 322	5 589	263 833	179 875	1 132 037	880 949	587 640
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	5 026	37 160	26 743	1 142 038	781 545	4 037 256	3 435 502	2 062 954
1721	Painting and paper hanging -----	2 092	11 155	9 382	242 732	190 233	644 565	605 022	452 106
1731	Electrical work -----	3 898	35 867	28 030	1 240 243	933 598	3 439 187	3 283 874	2 120 531
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	1 435	7 934	6 697	192 976	150 563	601 515	528 536	356 334
1742	Plastering, drywall, and insulation work -----	835	10 241	8 454	333 207	260 072	908 644	817 962	566 611
1743	Terrazzo, tile, marble, and mosaic work -----	454	2 438	1 766	68 978	49 198	215 374	203 555	125 818
175	Carpentry and floor work:								
1751	Carpentry -----	3 112	11 293	8 982	236 553	177 896	886 633	790 587	470 761
1752	Floor laying and other floor work -----	686	2 568	1 944	63 156	44 665	250 779	225 052	131 538
1761	Roofing, siding, and sheet metal work -----	1 655	10 777	8 232	286 097	198 498	934 882	856 800	531 697
1771	Concrete work -----	1 332	8 127	6 579	180 763	135 632	660 760	613 897	370 589
1781	Water well drilling -----	146	599	439	14 309	10 460	51 396	49 839	29 851
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	282	2 976	2 294	104 578	74 599	306 554	273 211	200 382
1793	Glass and glazing work -----	341	2 234	1 546	58 471	37 841	190 450	182 022	110 023
1794	Excavation work -----	884	4 627	3 646	121 889	95 265	451 170	400 535	287 544
1795	Wrecking and demolition work -----	63	1 101	915	25 583	18 771	88 750	79 720	66 073
1796	Installing building equipment, n.e.c. -----	307	6 830	5 141	250 761	182 574	629 624	606 071	458 732
1799	Special trade contractors, n.e.c. -----	1 622	13 677	10 100	318 176	209 952	1 034 251	924 301	582 626

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
9 114 592	7 465 955	8 097 102	442 685	324 994	3 758 837	326 979	33 594 491	17 131 349	(Z)	(Z)	2	15, 16, 17
												15
795 035	568 249	95 098	18 305	20 627	177 134	28 883	2 494 522	1 052 516	2	3	10	152
214 158	348 643	24 306	7 519	5 699	46 798	6 378	943 638	321 663	6	6	17	1521
422 534	474 592	4 874	3 920	5 962	109 500	7 506	2 140 888	684 003	5	5	17	1531
194 308	522 593	49 192	11 385	5 263	88 649	7 435	1 171 459	435 828	4	3	8	154
1 082 208	3 267 132	254 105	41 589	28 656	258 223	30 219	6 007 129	1 989 955	2	2	5	1542
												16
558 087	275 604	297 721	47 639	36 488	509 890	14 372	1 689 221	907 846	2	3	4	1611
188 183	195 440	49 209	21 846	11 569	145 104	3 583	323 040	176 688	1	2	4	162
233 792	107 310	161 456	30 995	21 759	249 488	6 771	682 317	445 462	2	2	17	1622
306 915	251 088	197 367	27 956	28 242	308 463	8 460	1 142 148	604 195	3	2	9	1623
												17
1 408 069	601 754	1 666 553	52 873	39 104	394 765	42 058	3 951 782	2 137 461	1	1	9	1711
154 882	39 544	281 170	9 604	8 163	57 228	12 182	675 524	487 626	3	3	9	1721
1 181 748	155 313	1 579 533	45 158	25 918	278 394	45 658	3 803 434	2 560 106	1	1	5	1731
176 136	72 979	317 368	9 006	9 034	83 208	11 026	722 348	472 945	4	3	13	174
255 819	90 681	753 466	10 942	5 351	66 883	16 365	1 276 255	812 851	2	2	10	1742
80 672	11 819	150 197	3 127	2 466	34 871	2 441	158 356	99 354	8	7	30	1743
337 237	96 046	359 282	9 512	8 997	101 627	14 433	973 950	537 670	3	3	13	175
97 875	25 727	118 003	3 494	1 422	18 214	3 602	304 169	171 670	4	6	13	1751
338 919	78 082	358 558	14 995	12 349	138 116	14 567	1 049 763	618 481	2	2	12	1761
252 567	46 863	291 023	11 738	8 251	151 390	10 998	952 856	556 442	7	3	14	1771
20 219	1 556	*7 761	1 481	1 108	25 472	897	68 799	42 801	7	8	14	1781
81 267	33 343	218 589	8 729	3 478	50 131	4 899	414 577	276 622	4	3	8	179
82 846	8 428	124 489	3 522	*1 208	20 757	2 471	202 792	107 817	5	5	42	1791
126 113	50 635	229 704	15 289	13 945	211 217	7 028	600 041	426 135	4	4	17	1793
14 682	9 030	31 087	3 962	1 190	22 528	1 533	110 716	89 154	(Z)	(Z)	(Z)	1794
150 706	23 553	165 165	9 845	4 590	60 441	6 952	600 546	438 018	2	1	5	1795
359 616	109 950	311 826	18 251	14 155	150 347	14 166	960 322	581 588	3	3	16	1796

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	36 550	36 877	26 521	27 120	(Z)	(Z)	1	1
Proprietors and working partners.....	9 709	6 470	6 146	9 386	2	3	3	3
All employees**	257 391	326 979	245 558	206 021	(Z)	(Z)	1	1
Construction workers:								
March.....	170 732	228 787	172 510	137 514	1	1	1	1
May	198 219	262 450	201 775	174 168	(Z)	(Z)	1	1
August	214 006	282 147	209 738	185 281	1	(Z)	(Z)	1
November	192 930	263 233	198 858	172 848	1	1	1	1
Average	193 972	259 154	198 098	167 610	(Z)	(Z)	1	1
Other employees:								
March.....	63 704	66 419	47 101	36 811	1	1	1	1
May	63 256	67 747	(NA)	(NA)	1	1	(NA)	(NA)
August	63 195	68 879	(NA)	(NA)	1	1	(NA)	(NA)
November	63 522	68 280	(NA)	(NA)	1	1	(NA)	(NA)
Average	63 419	67 831	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	7 572 256	8 319 456	4 493 607	2 858 468	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	5 308 972	6 006 049	3 497 569	2 228 805	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	2 263 285	2 313 407	996 038	629 663	(Z)	(Z)	1	1
First-quarter payroll, all employees	1 661 688	1 783 591	962 335	579 854	(Z)	1	(Z)	1
Fringe benefits, all employees	2 167 921	2 078 848	870 059	643 020	1	(Z)	1	(Z)
Legally required expenditures	1 283 853	1 417 665	661 127	309 194	1	(Z)	(Z)	(Z)
Voluntary expenditures	884 068	661 182	208 931	333 826	1	1	(Z)	(Z)
Dollar value of business done	31 348 606	34 671 208	18 036 541	10 764 509	(Z)	1	(Z)	(Z)
Value of construction work	30 716 613	33 594 491	17 682 919	10 519 618	(Z)	1	(Z)	(Z)
Value of construction work subcontracted in from others	8 097 102	379 080	4 133 824	2 297 267	1	1	1	1
Other business receipts	631 993	697 636	272 740	244 891	2	2	2	2
Net value of construction†	23 250 658	25 981 282	13 647 342	8 150 917	(Z)	(Z)	(Z)	(Z)
Value added††	14 768 059	17 131 349	8 635 210	5 124 726	(Z)	(Z)	(Z)	(Z)
Selected costs	16 580 547	17 160 778	9 320 449	5 555 440	1	1	(Z)	1
Materials, components, and supplies	8 657 740	9 068 136	5 000 493	3 012 597	1	1	1	1
Construction work subcontracted out to others	7 465 955	7 613 209	4 035 577	2 368 702	1	1	1	1
Selected power, fuels, and lubricants	456 853	479 432	284 379	174 141	1	1	1	1
Electricity.....	94 367	73 431	49 145	28 654	1	1	1	2
Natural gas	19 991	17 050	13 968	9 609	2	1	2	2
Gasoline and diesel fuel	316 444	357 816	202 773	111 457	1	1	1	1
On highway use.....	241 554	281 316	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use.....	74 890	76 500	(NA)	(NA)	2	3	(NA)	(NA)
Other, including lubricating oils and greases.....	26 051	31 133	18 493	24 424	2	2	2	2
Rental cost for machinery, equipment, and buildings	442 685	503 179	219 840	147 877	1	2	1	1
For machinery and equipment	251 390	342 188	162 787	117 106	2	2	1	2
For buildings.....	191 295	160 990	57 053	30 771	2	1	1	1
Selected purchased services	462 909	445 455	224 353	171 126	1	1	1	3
Communication services	165 967	150 778	81 260	66 403	2	1	1	5
Repairs to buildings and other structures	31 181	30 371	13 911	11 523	4	4	2	10
Repairs to machinery and equipment	265 761	264 305	129 182	93 200	2	1	1	3
Ownership of construction projects:								
Value of construction work	30 716 613	33 594 491	17 682 919	10 519 618	(Z)	1	(Z)	(Z)
Government owned	9 322 566	6 695 977	3 830 181	2 927 820	1	1	1	(Z)
Federal	1 362 132	1 212 207	(NA)	(NA)	2	2	(NA)	(NA)
State and local	7 960 435	5 483 769	(NA)	(NA)	2	1	(NA)	(NA)
Privately owned	21 394 047	26 898 514	13 852 738	7 591 798	1	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	3 589 031	2 787 307	1	2
Capital expenditures, other than land -----	324 994	504 538	2	2
New -----	253 391	409 428	3	2
Used -----	71 602	95 109	4	5
Retirements and disposition of depreciable assets -----	155 188	99 741	3	4
End-of-year gross book value of depreciable assets -----	3 758 837	3 192 104	1	2
Depreciation charges during year -----	401 098	401 845	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	527 042	601 852	3	4
Capital expenditures, other than land -----	38 882	57 288	7	5
New buildings and other structures -----	28 965	43 783	8	6
Used buildings and other structures -----	9 917	13 505	11	7
Retirements and disposition of depreciable assets -----	20 225	18 081	14	14
End-of-year gross book value of depreciable assets -----	545 699	641 059	3	4
Depreciation charges during year -----	44 370	55 018	4	4
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	3 061 989	2 185 454	1	2
Capital expenditures, other than land -----	286 112	447 249	2	2
New machinery and equipment, including automobiles and trucks -----	224 427	365 645	3	2
New automobiles and trucks, intended primarily for highway use -----	88 907	193 327	4	2
Used machinery and equipment, including automobiles and trucks -----	61 685	81 604	5	5
Retirements and disposition of depreciable assets -----	134 962	81 660	3	4
End-of-year gross book value of depreciable assets -----	3 213 138	2 551 044	1	2
Depreciation charges during year -----	356 729	346 826	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	36 550	(Z)
Value of construction work	30 716 613	(Z)
Establishments with inventories:		
Number	10 611	1
Value of construction work	11 590 484	1
Inventories ¹ :		
End of 1992, materials and supplies	413 033	4
End of 1991, materials and supplies	421 158	5
Establishments with no inventories:		
Number	11 924	1
Value of construction work	11 205 753	1
Establishments not reporting:		
Number	14 015	1
Value of construction work	7 920 376	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	36 550	24 231	6 731	3 171	1 732	439	203	32	11	—	
All employees** -----	257 391	43 676	42 583	41 737	51 500	29 732	29 500	11 071	7 592	—	
Payroll, all employees -----	7 572 256	808 640	1 027 994	1 187 804	1 730 504	1 056 050	1 098 856	389 292	273 117	—	
Dollar value of business done -----	31 348 606	4 483 184	4 168 744	4 729 704	6 937 252	4 071 947	4 321 091	1 618 485	1 018 199	—	
Value of construction work -----	30 716 613	4 430 032	4 090 979	4 657 601	6 831 143	4 003 663	4 267 048	1 453 740	982 408	—	
Net value of construction work† -----	23 250 658	3 615 999	3 340 323	3 713 843	4 981 941	2 958 051	3 068 187	923 187	649 127	—	
Value added†† -----	14 768 059	2 055 811	2 026 161	2 348 390	3 163 820	1 938 783	2 117 190	657 320	460 585	—	
Cost of materials, components, supplies, and fuels -----	9 114 592	1 613 340	1 391 928	1 437 557	1 924 230	1 087 552	1 005 040	430 612	224 333	—	
Cost of construction work subcontracted out to others -----	7 465 955	814 033	750 656	943 757	1 849 201	1 045 612	1 198 861	530 553	333 281	—	
Rental cost for machinery, equipment, and buildings -----	442 685	55 735	55 693	75 559	98 187	57 298	63 900	20 568	15 745	—	
Capital expenditures, other than land -----	324 994	64 433	48 997	51 523	70 915	40 237	33 477	(S)	7 874	—	
End-of-year gross book value of depreciable assets -----	3 758 837	656 641	575 684	680 390	902 739	434 199	365 599	83 561	60 024	—	
1987											
All employees** -----	326 979	(S)	48 358	55 165	66 923	40 191	39 574	16 720	8 560	7 094	
Value of construction work -----	33 594 491	(S)	4 194 661	5 351 331	6 886 758	4 791 730	4 603 876	2 375 657	1 566 414	(D)	
Value added†† -----	17 131 349	(S)	2 087 809	2 704 478	3 533 331	2 424 478	2 471 532	1 198 704	484 402	455 113	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	2	3	2	1	2	(Z)	(Z)	(Z)	—	
Net value of construction work† -----	(Z)	2	3	2	1	(Z)	(Z)	(Z)	(Z)	—	
Capital expenditures, other than land -----	2	7	9	6	1	(Z)	(Z)	(S)	(Z)	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	36 550	(S)	(S)	5 736	9 843	6 124	4 188	3 111	1 189	605	440
All employees** -----	257 391	(S)	(S)	8 482	25 427	28 129	32 685	44 065	32 118	28 916	52 505
Payroll, all employees -----	7 572 256	(S)	(S)	108 420	423 605	593 802	802 440	1 271 673	1 066 037	1 029 673	2 230 190
Dollar value of business done -----	31 348 606	(S)	(S)	414 493	1 589 195	2 145 837	2 919 378	4 780 067	4 177 990	4 102 532	11 068 612
Value of construction work -----	30 716 613	(S)	(S)	411 287	1 571 194	2 120 311	2 870 213	4 696 861	4 110 666	4 034 993	10 751 440
Net value of construction work† -----	23 250 658	(S)	(S)	385 034	1 452 091	1 895 697	2 499 061	3 876 439	3 309 557	2 949 333	6 742 949
Value added†† -----	14 768 059	(S)	(S)	232 356	876 817	1 151 280	1 521 271	2 411 588	2 089 066	1 882 312	4 516 463
Cost of materials, components, supplies, and fuels -----	9 114 592	(S)	(S)	155 885	593 275	769 943	1 026 955	1 548 056	1 287 814	1 134 559	2 543 658
Cost of construction work subcontracted out to others -----	7 465 955	(S)	(S)	(S)	119 103	224 614	371 152	820 423	801 109	1 085 660	4 008 491
Rental cost for machinery, equipment, and buildings -----	442 685	(S)	(S)	5 598	23 044	35 788	40 004	73 693	63 200	66 982	132 051
Capital expenditures, other than land -----	324 994	(S)	(S)	9 346	24 665	37 022	40 958	51 906	43 123	40 921	74 922
End-of-year gross book value of depreciable assets -----	3 758 837	(S)	(S)	85 848	275 344	415 867	441 861	654 009	586 990	473 648	799 988
1987											
All employees** -----	326 979	(S)	(S)	(S)	(S)	33 530	39 326	56 677	41 335	35 386	74 311
Value of construction work -----	33 594 491	(S)	(S)	(S)	(S)	2 093 967	2 957 733	5 464 528	4 600 118	4 396 085	11 932 609
Value added†† -----	17 131 349	(S)	(S)	(S)	(S)	1 140 863	1 583 015	2 922 583	2 362 997	2 231 841	5 657 157
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	(S)	(S)	4	3	3	3	2	1	(Z)	(Z)
Net value of construction work† -----	(Z)	(S)	(S)	3	3	3	3	2	2	1	(Z)
Capital expenditures, other than land -----	2	(S)	(S)	12	10	9	10	8	5	2	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

NY-10 NEW YORK

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	30 716 613	13 377 460	11 493 159	4 874 349	(Z)	1	1	1
Building construction	23 663 293	10 659 183	9 330 047	3 674 063	1	1	1	1
Single-family houses	5 682 138	3 255 531	1 617 792	808 814	2	3	3	3
Single-family houses, detached	4 773 962	2 678 074	1 392 874	703 014	2	3	3	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	908 176	577 458	224 918	105 800	7	10	8	6
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	1 984 788	539 812	897 593	547 382	3	2	4	5
Other residential buildings, including hotels, motels, and tourist cabins.....	368 518	142 866	166 205	59 447	5	6	9	5
Office buildings	4 268 001	1 241 900	2 357 958	668 144	1	2	1	2
Other commercial buildings such as stores, restaurants, and automobile service stations	3 137 249	1 499 622	1 055 268	582 359	1	2	2	2
Industrial buildings and warehouses	2 933 560	1 448 856	982 598	502 105	1	1	2	2
Industrial buildings	2 422 362	1 087 165	886 546	448 652	1	2	2	2
Warehouses	511 198	361 692	96 053	53 453	2	2	5	5
Religious buildings	254 105	91 512	107 348	55 245	3	4	5	5
Educational buildings	2 109 293	967 113	954 453	187 726	2	1	3	6
Hospitals and institutional buildings	2 000 236	968 098	873 220	158 918	1	1	2	3
Amusement, social, and recreational buildings, indoors	212 499	82 080	105 701	24 718	3	3	4	11
Other nonresidential buildings	712 908	421 792	211 912	79 204	3	3	3	7
Nonbuilding construction	6 081 675	2 718 277	2 163 112	1 200 287	1	1	1	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 936 792	665 959	831 889	438 943	2	3	2	5
Outdoor swimming pools	107 755	72 907	14 572	20 276	10	11	13	17
Private driveways and parking areas	211 667	98 258	45 645	67 764	7	11	9	7
Bridges, tunnels, and elevated highways	868 074	186 998	503 091	177 985	2	6	1	4
Marine construction	137 404	60 790	32 489	44 125	2	2	5	2
Conservation and development construction	169 687	111 874	43 580	14 233	6	6	10	4
Power and communication transmission lines, towers, and related facilities.....	324 769	180 403	69 016	75 350	4	7	3	3
Sewers, water mains, and related facilities.....	719 363	478 276	135 125	105 962	2	3	3	4
Sewers, sewer lines, septic systems, and related facilities	456 408	318 179	74 010	64 219	3	3	4	5
Water mains and related facilities	262 955	160 097	61 116	41 742	4	6	4	6
Pipeline construction other than sewer or water lines	235 301	144 425	40 667	50 209	2	3	2	3
Mass transit construction	279 797	127 891	118 372	33 534	4	1	8	18
Power plants	187 931	92 805	45 291	49 834	2	2	3	4
Sewage treatment and water treatment plants	458 799	271 973	155 440	31 386	2	2	2	4
Sewage treatment plants	290 159	191 339	77 496	21 324	2	2	4	3
Water treatment plants	168 640	80 634	77 944	10 063	2	2	2	8
Other nonbuilding construction	444 337	225 719	127 935	90 684	4	6	7	5
Construction work, n.s.k.	971 645	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
1987								
Value of construction work	33 594 491	17 380 155	10 289 820	3 914 629	1	1	1	1
Building construction	25 821 724	14 222 094	8 578 801	3 020 832	1	1	1	1
Single-family houses	6 498 756	4 461 415	1 451 238	586 102	2	3	3	3
Single-family houses, detached	5 101 827	3 285 225	1 313 058	503 543	2	3	3	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	1 396 928	1 176 190	138 179	82 558	5	5	7	7
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	2 220 823	1 243 672	596 036	381 114	2	2	5	3
Other residential buildings, including hotels, motels, and tourist cabins.....	934 118	539 864	273 277	120 977	3	3	6	6
Office buildings	6 996 574	3 167 353	3 123 026	706 195	1	1	1	2
Other commercial buildings such as stores, restaurants, and automobile service stations	2 907 629	1 496 201	963 432	447 995	1	2	2	2
Industrial buildings and warehouses	2 880 100	1 569 977	860 109	450 014	2	2	2	2
Industrial buildings	2 420 931	1 277 078	744 316	399 537	2	2	2	2
Warehouses	459 169	292 898	115 793	50 477	3	4	5	4
Religious buildings	198 283	76 424	73 315	48 543	4	6	8	5
Educational buildings	1 168 165	537 203	525 353	105 607	2	2	3	3
Hospitals and institutional buildings	1 328 126	673 830	547 918	106 378	1	2	2	5
Amusement, social, and recreational buildings, indoors	154 263	86 471	51 136	16 656	4	4	5	6
Other nonresidential buildings	534 887	369 684	113 961	51 251	3	3	8	15
Nonbuilding construction	5 762 878	3 158 061	1 711 019	893 797	1	1	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 662 564	745 378	605 795	311 390	2	2	4	2
Outdoor swimming pools	170 350	131 766	15 861	22 723	10	11	22	16
Private driveways and parking areas	194 278	125 630	31 149	37 499	7	8	12	12
Bridges, tunnels, and elevated highways	503 608	277 719	148 895	76 993	1	1	1	7
Power and communication transmission lines, towers, and related facilities.....	477 307	292 899	141 497	42 910	2	3	1	8
Sewers, water mains, and related facilities.....	736 052	531 484	113 986	90 581	3	3	6	5
Sewers, sewer lines, septic systems, and related facilities	446 568	317 644	68 371	60 553	3	3	7	6
Water mains and related facilities	289 484	213 840	45 615	30 028	3	3	8	6
Pipeline construction other than sewer or water lines	163 036	76 596	35 178	51 261	5	6	3	10
Mass transit construction	438 944	130 339	269 567	39 038	1	1	(Z)	4
Power plants	156 009	61 034	45 660	49 314	3	3	6	4
Sewage treatment and water treatment plants	466 414	347 862	97 826	20 725	3	4	4	3
Sewage treatment plants	381 420	297 007	70 000	14 412	4	5	2	3
Water treatment plants	84 994	50 855	27 825	6 313	6	5	13	9
Other nonbuilding construction	794 316	437 354	205 605	151 363	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	2 009 889	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	36 550	193 972	170 732	198 219	214 006	192 930	(Z)	(Z)	1	(Z)	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	6 638	15 309	13 816	15 514	16 992	14 916	2	3	3	3	3	3
1522	Other residential buildings -----	791	3 721	3 233	3 803	3 940	3 909	8	6	6	6	6	7
1531	Operative builders -----	828	1 995	1 915	2 059	2 123	1 885	6	7	7	7	7	7
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	411	3 268	3 086	3 125	3 334	3 527	9	4	4	4	4	5
1542	Nonresidential buildings, n.e.c. ----	1 883	14 981	13 483	15 215	16 445	14 783	4	2	2	2	2	2
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	536	8 563	4 738	9 791	10 889	8 834	6	2	3	3	3	2
162	Heavy construction, except highway: Bridge, tunnel, and elevated												
1622	highway construction -----	96	3 462	2 558	3 389	4 214	3 685	11	1	1	2	1	1
1623	Water, sewer, and utility lines -----	455	6 193	5 340	6 403	6 901	6 127	7	2	2	2	2	2
1629	Heavy construction, n.e.c. -----	742	5 589	4 117	5 844	6 443	5 955	6	3	3	3	3	3
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	5 026	26 743	25 981	26 561	28 103	26 326	1	1	1	1	1	1
1721	Painting and paper hanging -----	2 092	9 382	6 843	10 456	11 913	8 316	2	3	3	3	3	3
1731	Electrical work -----	3 898	28 030	28 504	27 587	28 731	27 299	1	1	1	1	1	1
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	1 435	6 697	5 219	6 997	7 413	7 157	4	4	3	4	4	5
1742	Plastering, drywall, and insulation work -----	835	8 454	8 375	8 357	8 735	8 349	5	2	2	2	2	3
1743	Terrazzo, tile, marble, and mosaic work -----	454	1 766	1 777	1 877	1 817	1 592	8	8	7	8	8	8
175	Carpentry and floor work:												
1751	Carpentry -----	3 112	8 982	8 185	9 289	9 610	8 843	2	3	3	3	3	3
1752	Floor laying and other floor work --	686	1 944	1 929	1 995	2 027	1 825	5	4	4	4	4	6
1761	Roofing, siding, and sheet metal work -----	1 655	8 232	6 390	8 156	9 599	8 782	3	3	3	3	3	3
1771	Concrete work -----	1 332	6 579	3 898	7 157	8 019	7 242	4	7	11	6	6	10
1781	Water well drilling -----	146	439	417	419	464	457	2	7	7	7	8	10
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	282	2 294	2 278	2 375	2 349	2 172	11	4	5	4	4	4
1793	Glass and glazing work -----	341	1 546	1 501	1 558	1 657	1 469	8	5	4	5	5	5
1794	Excavation work -----	884	3 646	2 685	3 761	4 334	3 804	6	5	5	4	5	5
1795	Wrecking and demolition work -----	63	915	857	936	987	881	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1796	Installing building equipment, n.e.c. -----	307	5 141	5 309	4 775	5 179	5 303	6	3	3	3	3	3
1799	Special trade contractors, n.e.c. ----	1 622	10 100	8 297	10 820	11 790	9 492	5	3	3	3	4	3

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	7.0	29.4	158.4	.247	.297	.243	.264	.014
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.2	18.4	142.8	.176	.364	.260	.044	.008
1522	Other residential buildings -----	6.7	25.6	223.2	.162	.258	.420	.029	.009
1531	Operative builders -----	5.1	29.0	660.9	.093	.320	.360	.004	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	11.6	34.5	312.1	.161	.190	.512	.048	.011
1542	Nonresidential buildings, n.e.c. -----	12.0	35.0	371.4	.142	.195	.587	.046	.007
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	20.1	35.1	192.7	.229	.338	.167	.180	.029
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	44.1	43.5	219.8	.242	.247	.257	.065	.029
1623	Water, sewer, and utility lines -----	17.1	34.7	149.0	.292	.253	.116	.175	.034
1629	Heavy construction, n.e.c. -----	9.9	36.0	202.5	.233	.271	.222	.174	.025
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	7.4	30.7	151.0	.283	.349	.149	.413	.013
1721	Painting and paper hanging -----	5.3	21.8	68.7	.377	.240	.061	.436	.015
1731	Electrical work -----	9.2	34.6	122.7	.361	.344	.045	.459	.013
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.5	24.3	89.8	.321	.293	.121	.528	.015
1742	Plastering, drywall, and insulation work -----	12.3	32.5	107.5	.367	.282	.100	.829	.012
1743	Terrazzo, tile, marble, and mosaic work -----	5.4	28.3	122.0	.320	.375	.055	.697	.015
175	Carpentry and floor work:								
1751	Carpentry -----	3.6	20.9	98.7	.267	.380	.108	.405	.011
1752	Floor laying and other floor work -----	3.7	24.6	129.0	.252	.390	.103	.471	.014
1761	Roofing, siding, and sheet metal work -----	6.5	26.5	113.6	.306	.363	.084	.384	.016
1771	Concrete work -----	6.1	22.2	100.4	.274	.382	.071	.440	.018
1781	Water well drilling -----	4.1	23.9	117.1	.278	.393	.030	*.151	.029
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	10.5	35.1	133.6	.341	.265	.109	.713	.028
1793	Glass and glazing work -----	6.5	26.2	123.2	.307	.435	.044	.654	.018
1794	Excavation work -----	5.2	26.3	123.7	.270	.280	.112	.509	.034
1795	Wrecking and demolition work -----	17.5	23.2	97.0	.288	.165	.102	.350	.045
1796	Installing building equipment, n.e.c. -----	22.2	36.7	122.5	.398	.239	.037	.262	.016
1799	Special trade contractors, n.e.c. -----	8.4	23.3	102.4	.308	.348	.106	.301	.018

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA												
15,16, 17	Construction industries	42 350	293 351	9 218 472	37 414 756	28 282 143	18 392 725	10 662 353	9 132 613	369 395	(Z)	(Z)
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	7 113	21 794	432 130	2 472 841	1 798 370	985 496	848 216	674 471	20 780	2	3
1522	Other residential buildings	835	5 490	153 426	927 370	551 355	337 646	224 493	376 015	4 926	5	6
1531	Operative builders	1 018	6 282	181 447	2 108 389	1 398 163	896 224	583 977	710 226	10 621	4	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	473	6 777	228 107	1 478 248	721 385	485 489	256 717	756 863	6 091	3	3
1542	Nonresidential buildings, n.e.c.	2 184	25 875	942 296	6 760 487	2 879 876	1 837 012	1 345 434	3 880 610	31 176	2	1
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	648	11 541	420 833	1 779 832	1 448 854	921 211	565 867	330 978	42 479	2	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	78	4 397	198 889	823 663	632 063	445 470	199 490	191 600	10 308	1	1
1623	Water, sewer, and utility lines	466	9 358	355 962	1 249 484	1 065 185	789 931	296 065	184 299	27 771	2	2
1629	Heavy construction, n.e.c.	676	10 703	438 031	1 750 592	1 442 084	1 059 465	466 715	308 508	29 103	2	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	6 509	42 500	1 392 063	4 696 119	4 054 819	2 482 719	1 610 349	641 300	44 984	1	1
1721	Painting and paper hanging	2 460	11 826	280 880	750 105	701 211	534 363	171 438	48 895	9 868	3	2
1731	Electrical work	5 212	42 806	1 529 521	4 135 160	3 952 544	2 587 075	1 383 066	182 616	29 419	1	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	1 740	8 920	215 431	720 061	626 354	420 524	210 129	93 707	6 858	3	3
1742	Plastering, drywall, and insulation work	959	11 663	399 161	1 061 626	954 210	670 604	289 450	107 416	9 942	3	2
1743	Terrazzo, tile, marble, and mosaic work	560	2 518	72 380	227 457	212 009	135 777	78 384	15 448	2 410	8	7
175	Carpentry and floor work:											
1751	Carpentry	3 414	12 366	283 674	1 082 162	945 907	562 093	401 491	136 255	(S)	3	4
1752	Floor laying and other floor work	756	3 529	94 519	358 405	320 221	190 894	138 062	38 184	(S)	3	5
1761	Roofing, siding, and sheet metal work	1 817	10 839	307 237	976 792	882 317	563 423	324 331	94 475	12 679	2	2
1771	Concrete work	1 218	7 659	190 507	639 068	591 850	359 217	241 033	47 218	9 701	7	4
1781	Water well drilling	127	694	21 589	78 340	73 778	45 316	28 540	4 562	1 335	7	6
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	275	3 229	117 785	365 864	324 796	239 101	88 923	41 068	2 428	5	2
1793	Glass and glazing work	403	2 449	67 938	215 385	204 561	122 457	89 496	10 823	1 744	5	4
1794	Excavation work	926	4 876	140 467	476 199	427 018	302 804	134 726	49 181	20 201	4	5
1795	Wrecking and demolition work	90	1 668	38 783	141 649	126 897	106 930	23 890	14 752	1 945	2	3
1796	Installing building equipment, n.e.c.	339	7 802	311 525	841 241	792 198	565 583	228 917	49 042	4 371	1	(Z)
1799	Special trade contractors, n.e.c.	2 056	15 790	403 891	1 298 219	1 154 116	745 902	433 154	144 102	16 943	3	3
Bergen–Passaic, NJ PMSA												
15,16, 17	Construction industries	3 805	27 827	877 468	3 341 538	2 675 177	1 825 453	968 390	666 362	32 405	1	1
	(See appropriate State for SIC detail.)											
Bridgeport, CT PMSA												
15,16, 17	Construction industries	1 032	5 940	178 098	698 909	529 942	347 931	194 890	168 967	8 091	3	3
	(See appropriate State for SIC detail.)											
Danbury, CT PMSA												
15,16, 17	Construction industries	710	3 255	98 901	453 931	324 836	195 875	133 634	129 095	6 059	4	4
	(See appropriate State for SIC detail.)											

NY–14 NEW YORK

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	Dutchess County, NY PMSA											
15,16,17	Construction industries	742	4 096	114 520	489 015	375 227	231 309	156 061	113 789	6 023	5	6
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	138	387	7 277	63 296	45 417	19 018	26 621	*17 880	629	21	25
1522	Other residential buildings	*20	*69	*964	*5 048	*4 252	*2 544	*1 708	*796	(D)	57	53
1531	Operative builders	(S)	185	(S)	(S)	(S)	(S)	*13 167	14 207	*127	37	(S)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	*16	(S)	7 173	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1542	Nonresidential buildings, n.e.c.	(S)	(S)	(S)	(S)	(S)	16 146	(S)	(S)	517	(S)	(S)
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	11	238	5 504	*31 334	*22 771	*14 717	*8 180	*8 563	865	23	46
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	*7	69	1 647	(D)	6 606	4 153	(D)	(D)	(D)	22	12
1629	Heavy construction, n.e.c.	12	160	5 340	19 485	16 467	11 769	4 717	3 018	327	2	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	(S)	712	26 480	88 103	72 201	46 595	25 748	15 903	1 142	10	7
1721	Painting and paper hanging	33	218	4 265	10 519	10 107	7 378	*2 738	412	538	35	37
1731	Electrical work	65	354	10 975	33 230	31 967	17 696	14 431	*1 263	623	16	15
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	297	(D)	(S)	(S)
1742	Plastering, drywall, and insulation work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	102	(D)	(D)
1743	Terrazzo, tile, marble, and mosaic work	—	—	—	—	—	—	—	—	—	—	—
175	Carpentry and floor work:											
1751	Carpentry	71	226	4 967	19 113	17 402	*9 342	8 175	*1 711	252	34	36
1752	Floor laying and other floor work	*19	*36	632	*2 631	*2 631	*1 606	*1 025	—	(D)	46	44
1761	Roofing, siding, and sheet metal work	(S)	(S)	(S)	(S)	(S)	3 104	(S)	(S)	62	(S)	(S)
1771	Concrete work	(S)	(S)	*2 430	8 846	8 659	5 414	(S)	(S)	*280	(S)	37
1781	Water well drilling	*2	*17	*479	*1 502	*1 502	*1 094	*408	—	*22	72	71
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	—	—	—	—	—	—	—	—	—	—	—
1793	Glass and glazing work	*3	*21	*592	(D)	(D)	*941	*1 300	(D)	—	66	(D)
1794	Excavation work	38	(S)	(S)	(D)	(D)	(S)	1 639	(D)	—	(S)	(D)
1795	Wrecking and demolition work	1	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1796	Installing building equipment, n.e.c.	2	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1799	Special trade contractors, n.e.c.	45	297	5 968	24 383	22 889	12 999	11 358	1 494	125	21	16
	Jersey City, NJ PMSA											
15,16,17	Construction industries	776	5 896	188 387	674 560	558 706	369 589	196 350	115 854	5 989	3	4
	(See appropriate State for SIC detail.)											
	Middlesex–Somerset–Hunterdon, NJ PMSA											
15,16,17	Construction industries	2 765	19 015	604 438	2 620 186	2 000 280	1 247 470	789 895	619 906	29 971	1	2
	(See appropriate State for SIC detail.)											
	Monmouth–Ocean, NJ PMSA											
15,16,17	Construction industries	2 725	15 377	418 295	2 128 055	1 594 996	1 004 473	631 216	533 059	25 342	2	3
	(See appropriate State for SIC detail.)											

CONSTRUCTION—GEOGRAPHIC AREA SERIES

NEW YORK NY–15

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.											
	Nassau—Suffolk, NY PMSA											
15,16, 17	Construction industries	8 068	44 952	1 224 727	4 994 826	3 872 198	2 440 215	1 491 173	1 122 629	54 762	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 549	4 715	90 346	534 858	368 726	199 073	180 185	166 132	(S)	5	6
1522	Other residential buildings	(S)	(S)	13 614	85 345	55 083	(S)	23 194	30 261	(D)	(S)	16
1531	Operative builders	155	591	18 580	250 621	170 048	114 231	60 013	80 573	809	11	15
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	498	14 912	109 390	34 964	24 691	(S)	74 426	(S)	15	16
1542	Nonresidential buildings, n.e.c.	387	3 381	101 669	662 514	301 898	178 526	126 894	360 615	(S)	5	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	96	1 541	49 812	239 991	200 761	124 169	83 634	39 230	4 232	7	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1623	Water, sewer, and utility lines	(S)	1 209	44 662	139 928	126 329	97 199	29 199	13 599	2 319	4	3
1629	Heavy construction, n.e.c.	(S)	1 638	66 702	254 671	182 065	131 901	53 547	72 606	5 376	8	5
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 243	6 728	195 399	681 939	597 751	364 267	237 040	84 188	7 067	3	2
1721	Painting and paper hanging	384	2 099	44 954	120 022	111 993	82 548	29 599	8 030	2 897	5	6
1731	Electrical work	954	5 261	148 341	458 547	427 425	268 998	161 677	31 122	4 466	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	345	1 790	42 257	136 920	120 976	81 670	39 918	15 943	2 417	7	5
1742	Plastering, drywall, and insulation work	196	1 968	66 523	185 695	171 366	112 841	58 579	14 329	1 409	4	5
1743	Terrazzo, tile, marble, and mosaic work	127	378	10 316	33 649	29 827	19 704	10 202	*3 822	887	16	16
175	Carpentry and floor work:											
1751	Carpentry	697	2 582	57 307	222 192	194 539	112 392	(S)	27 654	2 320	5	6
1752	Floor laying and other floor work	207	833	19 480	75 016	64 240	39 121	27 744	10 776	(S)	8	11
1761	Roofing, siding, and sheet metal work	315	1 656	49 292	153 361	136 301	89 600	46 833	17 060	(S)	7	6
1771	Concrete work	330	2 358	45 302	161 448	153 237	93 053	63 950	8 211	(S)	21	8
1781	Water well drilling	21	170	5 883	17 369	(D)	10 969	5 301	(D)	222	16	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	50	540	22 231	70 974	62 664	44 038	18 653	*8 310	(S)	9	10
1793	Glass and glazing work	83	528	10 249	33 846	33 366	18 091	16 038	*480	592	11	11
1794	Excavation work	(S)	543	15 185	49 236	44 179	34 055	13 345	5 057	3 147	14	12
1795	Wrecking and demolition work	9	83	2 590	6 441	(D)	5 344	487	(D)	117	(Z)	(D)
1796	Installing building equipment, n.e.c.	(S)	441	15 964	47 061	44 821	27 924	17 010	2 239	(D)	7	3
1799	Special trade contractors, n.e.c.	384	2 724	63 173	233 141	196 113	125 763	72 637	37 028	(S)	7	6
	New Haven—Meriden, CT PMSA											
15,16, 17	Construction industries	1 351	9 080	282 141	1 101 261	864 400	532 933	350 990	236 861	(S)	3	2

(See appropriate State for SIC detail.)

NY—16 NEW YORK

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	New York, NY PMSA											
15,16, 17	Construction industries	12 358	109 208	3 729 636	14 477 032	10 612 957	7 104 953	3 877 610	3 864 074	119 089	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	(S)	(S)	(S)	(S)	(S)	(S)	174 829	(S)	(S)	(S)
1522	Other residential buildings	503	3 806	101 163	626 007	344 169	212 584	139 886	281 837	3 876	7	7
1531	Operative builders	(S)	(S)	(S)	(S)	(S)	124 461	(S)	(S)	(S)	(S)	(S)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(S)	(S)	541 439	(S)	(S)	(S)	304 958	(S)	(S)	(S)
1542	Nonresidential buildings, n.e.c.	791	11 017	436 203	3 033 047	1 172 074	805 621	587 361	1 860 973	13 622	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	169	4 099	157 125	661 565	535 220	355 161	200 205	126 345	13 765	3	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	45	2 664	125 835	541 042	403 766	298 210	114 536	137 276	6 976	1	2
1623	Water, sewer, and utility lines	141	3 380	120 695	441 666	383 213	293 899	98 352	58 454	9 682	3	3
1629	Heavy construction, n.e.c.	(S)	2 189	94 440	455 501	344 347	224 375	121 538	111 153	9 706	3	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 965	15 916	535 454	1 832 814	1 549 056	955 273	605 170	283 758	16 250	2	2
1721	Painting and paper hanging	872	4 967	134 908	353 077	329 456	254 808	75 927	23 621	(S)	5	4
1731	Electrical work	1 620	20 483	799 200	2 087 583	1 998 837	1 349 452	655 834	88 746	(S)	1	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	2 882	78 929	261 708	216 994	145 843	71 503	44 714	(S)	5	5
1742	Plastering, drywall, and insulation work	287	4 102	148 533	376 951	338 370	250 416	88 841	38 582	(S)	4	3
1743	Terrazzo, tile, marble, and mosaic work	199	1 391	40 765	122 855	117 658	76 108	42 448	5 197	828	12	11
175	Carpentry and floor work:											
1751	Carpentry	(S)	4 211	102 521	335 719	297 162	187 908	(S)	(S)	(S)	4	6
1752	Floor laying and other floor work	(S)	894	26 699	106 790	96 037	55 314	41 229	10 752	(S)	7	10
1761	Roofing, siding, and sheet metal work	494	3 445	104 021	305 260	278 472	189 046	94 515	26 787	5 357	4	4
1771	Concrete work	247	1 740	47 968	168 010	149 735	90 293	60 803	18 276	1 307	7	7
1781	Water well drilling	11	(S)	1 171	(S)	(S)	2 545	(S)	(S)	(D)	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	117	962	37 628	103 348	89 977	71 078	21 306	13 371	(S)	8	5
1793	Glass and glazing work	134	743	24 339	69 607	66 046	43 298	24 692	3 561	(D)	8	7
1794	Excavation work	173	1 599	50 473	161 330	138 878	91 354	50 531	22 452	4 036	7	9
1795	Wrecking and demolition work	36	777	16 157	54 884	48 423	40 839	7 920	6 461	589	(Z)	(Z)
1796	Installing building equipment, n.e.c.	147	4 224	193 408	459 673	444 197	342 987	102 193	15 476	2 387	1	(Z)
1799	Special trade contractors, n.e.c.	(S)	5 071	132 319	413 231	368 715	234 651	138 290	44 516	3 391	5	6
	Newark, NJ PMSA											
15,16, 17	Construction industries	4 737	30 728	994 606	3 889 810	3 123 797	2 026 165	1 151 210	766 012	46 706	1	1

(See appropriate State for SIC detail.)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

NEW YORK NY—17

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	Newburgh, NY–PA PMSA											
15,16,17	Construction industries	1 035	3 891	101 839	415 465	350 342	206 446	146 555	65 123	6 561	3	4
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	(S)	(S)	55 551	(D)	(S)	29 408	(D)	(S)	(S)	(D)
1522	Other residential buildings	(S)	*43	*748	*4 662	*3 717	*2 456	*1 261	(S)	(D)	47	47
1531	Operative builders	(S)	145	(S)	47 630	32 840	21 406	12 104	14 790	(S)	23	26
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	3	28	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1542	Nonresidential buildings, n.e.c.	37	158	4 229	17 836	(D)	7 032	(S)	(D)	(S)	17	(D)
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	27	236	11 395	30 462	28 990	22 392	6 625	1 472	(D)	10	5
1629	Heavy construction, n.e.c.	19	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(S)	(S)	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	119	460	12 079	52 146	48 453	26 150	23 121	3 692	(S)	9	8
1721	Painting and paper hanging	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1731	Electrical work	101	635	19 349	47 659	46 760	28 744	18 054	898	892	7	7
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	75	188	4 118	14 129	13 748	10 025	3 726	381	(S)	23	25
1742	Plastering, drywall, and insulation work	(S)	(S)	(S)	2 872	2 201	(S)	(D)	671	(S)	(S)	(Z)
1743	Terrazzo, tile, marble, and mosaic work	*16	*48	*834	*3 436	*3 356	*1 914	*1 460	80	—	62	57
175	Carpentry and floor work:											
1751	Carpentry	98	208	4 560	21 648	17 027	9 085	8 047	4 620	144	12	18
1752	Floor laying and other floor work	22	80	1 920	7 889	7 277	4 472	2 897	612	(D)	19	13
1761	Roofing, siding, and sheet metal work	44	106	1 979	6 151	5 787	3 775	2 069	(S)	(D)	20	19
1771	Concrete work	(S)	(S)	(S)	(S)	11 499	(S)	4 703	(S)	(S)	(S)	10
1781	Water well drilling	(S)	(S)	(D)	(S)	(S)	(S)	(S)	29	113	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	4	(D)	(D)	(D)	(D)	(D)	66	(D)	—	(D)	(D)
1793	Glass and glazing work	2	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1794	Excavation work	75	224	4 608	18 027	17 419	12 592	4 939	608	*660	25	27
1795	Wrecking and demolition work	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c.	(S)	(D)	(D)	(D)	(D)	(D)	(S)	(D)	(D)	(S)	(D)
1799	Special trade contractors, n.e.c.	42	280	7 891	(D)	(D)	14 716	8 505	(D)	361	16	(D)
	Stamford–Norwalk, CT PMSA											
15,16,17	Construction industries	987	6 211	183 104	1 076 075	620 111	355 313	276 985	455 964	(S)	2	3
	(See appropriate State for SIC detail.)											
	Trenton, NJ PMSA											
15,16,17	Construction industries	691	4 984	137 822	746 410	524 888	345 956	195 957	221 522	5 847	2	1
	(See appropriate State for SIC detail.)											
	Waterbury, CT PMSA											
15,16,17	Construction industries	569	2 891	84 490	307 681	254 285	158 646	101 436	53 396	4 683	6	6
	(See appropriate State for SIC detail.)											

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	BUFFALO–NIAGARA FALLS, NY MSA											
	Construction industries	2 770	19 882	511 310	2 223 494	1 731 257	1 044 741	721 901	492 237	29 018	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	520	1 690	30 528	187 406	133 044	62 005	72 671	54 363	1 791	9	11
1522	Other residential buildings	47	253	3 895	23 162	13 946	8 166	(D)	9 216	300	19	22
1531	Operative builders	82	434	12 363	135 325	85 710	47 967	45 946	49 616	673	18	12
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	44	518	16 860	93 481	48 813	33 992	14 921	44 668	589	9	5
1542	Nonresidential buildings, n.e.c.	87	1 011	33 031	343 777	151 996	94 347	61 594	191 781	1 201	5	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	50	929	30 845	133 403	112 124	67 171	48 969	21 279	3 770	6	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	8	348	9 971	33 667	28 912	19 504	9 508	4 755	313	4	6
1623	Water, sewer, and utility lines	49	553	16 620	57 849	50 479	33 152	18 109	7 370	(S)	14	8
1629	Heavy construction, n.e.c.	36	450	13 242	52 875	43 855	29 696	14 220	9 020	1 563	10	9
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	315	2 792	75 487	271 497	227 101	128 192	101 093	44 396	1 837	4	3
1721	Painting and paper hanging	177	649	13 955	41 440	39 974	26 683	13 319	1 466	624	11	11
1731	Electrical work	205	1 763	52 474	156 999	152 324	89 697	63 838	4 676	1 580	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	93	776	18 082	49 112	46 440	32 705	14 167	2 672	1 779	11	7
1742	Plastering, drywall, and insulation work	65	1 117	30 791	85 788	78 256	53 694	24 966	7 531	328	7	5
1743	Terrazzo, tile, marble, and mosaic work	16	116	(D)	13 368	(D)	(D)	6 717	(D)	134	1	(D)
175	Carpentry and floor work:											
1751	Carpentry	228	928	13 925	64 230	57 493	32 187	26 644	6 737	*1 214	12	14
1752	Floor laying and other floor work	62	232	4 913	19 844	18 508	11 350	7 794	1 336	*251	6	6
1761	Roofing, siding, and sheet metal work	175	1 619	42 211	143 058	136 585	79 836	59 594	6 473	2 356	4	5
1771	Concrete work	204	1 121	28 186	102 656	96 630	50 221	47 560	6 026	(S)	6	7
1781	Water well drilling	—	—	—	—	—	—	—	—	—	—	—
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	19	365	11 713	36 254	33 916	25 183	9 977	2 338	1 351	2	5
1793	Glass and glazing work	35	210	5 666	19 576	18 731	9 590	9 176	*845	113	20	14
1794	Excavation work	60	362	11 336	61 230	52 977	44 522	9 732	8 252	1 020	13	8
1795	Wrecking and demolition work	6	106	(D)	17 165	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c.	30	468	7 912	21 374	(D)	13 875	7 309	(D)	(D)	6	(D)
1799	Special trade contractors, n.e.c.	157	1 073	20 102	58 957	54 944	34 164	24 175	4 012	1 947	9	9
15,16, 17	ALBANY–SCHENECTADY–TROY, NY MSA											
	Construction industries	2 202	16 191	442 078	1 933 524	1 474 339	888 242	615 221	459 185	22 061	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	437	1 262	24 216	134 826	109 084	54 513	56 551	25 742	1 401	10	13
1522	Other residential buildings	(S)	(D)	1 829	12 475	7 127	(D)	5 344	5 348	67	(D)	13
1531	Operative builders	92	528	17 685	173 618	106 847	58 162	52 561	66 772	715	15	14
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	24	284	8 200	32 049	21 163	13 717	7 832	10 886	620	14	8
1542	Nonresidential buildings, n.e.c.	98	1 639	57 688	379 814	159 066	97 251	62 999	220 749	2 026	5	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	21	661	27 505	115 937	98 367	51 111	50 389	17 570	3 530	3	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	8	249	12 259	46 911	30 932	16 366	14 847	15 979	990	5	2
1623	Water, sewer, and utility lines	27	320	8 996	31 221	27 099	16 257	13 014	4 121	959	12	12
1629	Heavy construction, n.e.c.	58	584	17 433	71 283	63 745	38 542	26 989	7 538	1 524	10	11

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	ALBANY–SCHENECTADY–TROY, NY MSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	260	2 331	66 770	248 807	215 281	136 374	81 563	33 526	1 632	3	2
1721	Painting and paper hanging	88	1 263	12 998	32 741	31 054	21 885	9 542	1 687	*640	5	10
1731	Electrical work	181	1 626	50 520	153 363	144 660	81 622	65 467	8 703	1 525	8	6
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	93	379	8 780	27 891	23 022	13 915	9 256	4 869	554	16	11
1742	Plastering, drywall, and insulation work	57	873	27 410	77 772	72 621	50 809	22 751	5 150	529	7	5
1743	Terrazzo, tile, marble, and mosaic work	30	241	7 114	17 717	16 936	10 934	7 863	*782	411	22	20
175	Carpentry and floor work:											
1751	Carpentry	250	581	10 175	54 314	47 952	24 887	23 510	(S)	768	14	18
1752	Floor laying and other floor work	39	131	2 597	10 432	10 001	3 800	6 507	431	*113	18	21
1761	Roofing, siding, and sheet metal work	103	733	19 183	68 586	65 297	40 837	25 064	3 289	690	6	5
1771	Concrete work	100	597	15 112	82 516	76 605	55 481	21 568	5 911	884	9	5
1781	Water well drilling	11	76	(D)	(D)	(D)	3 408	(D)	66	(D)	29	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	29	353	11 363	32 470	28 577	20 080	10 105	3 893	595	12	8
1793	Glass and glazing work	20	104	2 755	14 913	13 370	8 472	5 743	*1 544	(D)	25	34
1794	Excavation work	63	297	5 809	27 241	25 560	17 998	7 795	1 680	(S)	18	14
1795	Wrecking and demolition work	2	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	21	254	6 313	18 287	17 157	14 475	*3 273	1 130	(S)	21	26
1799	Special trade contractors, n.e.c.	59	735	17 137	60 981	55 521	34 320	22 002	5 460	1 197	11	9
	ROCHESTER, NY MSA											
15,16, 17	Construction industries	2 450	18 015	472 607	2 103 105	1 579 430	891 385	730 158	523 675	25 002	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	431	1 359	27 517	168 649	133 807	68 589	66 329	34 842	2 039	10	11
1522	Other residential buildings	18	200	(S)	34 716	24 278	(S)	19 345	(S)	961	18	33
1531	Operative builders	87	603	18 478	188 721	122 014	51 322	76 143	66 707	1 403	6	10
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	46	455	14 484	76 659	46 899	31 177	17 915	29 760	642	9	8
1542	Nonresidential buildings, n.e.c.	104	1 313	43 190	369 280	132 778	64 689	70 084	236 502	2 477	4	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	933	29 153	122 740	103 959	55 268	52 893	18 781	2 547	3	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	159	4 482	22 718	(D)	7 506	7 913	(D)	381	2	(D)
1623	Water, sewer, and utility lines	36	679	21 160	75 573	70 116	41 236	29 649	5 457	2 225	6	4
1629	Heavy construction, n.e.c.	47	459	12 343	66 440	51 519	29 189	22 602	14 921	340	11	11
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	293	3 197	92 265	319 823	263 727	157 842	115 787	56 097	2 437	3	3
1721	Painting and paper hanging	157	685	12 646	34 802	33 548	22 746	10 874	1 254	204	11	10
1731	Electrical work	205	1 960	59 970	186 373	176 748	101 328	76 887	9 625	1 821	4	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	179	752	13 126	39 330	38 477	24 901	15 797	853	772	20	18
1742	Plastering, drywall, and insulation work	62	835	24 002	66 138	59 733	37 529	23 807	6 405	(S)	5	6
1743	Terrazzo, tile, marble, and mosaic work	24	79	2 300	11 463	(D)	3 771	*7 346	(D)	(D)	21	(D)
175	Carpentry and floor work:											
1751	Carpentry	233	832	15 320	51 566	48 334	31 808	16 646	3 232	801	10	10
1752	Floor laying and other floor work	40	105	2 278	10 371	9 099	5 133	4 152	1 271	*16	6	10
1761	Roofing, siding, and sheet metal work	132	774	17 673	63 616	56 552	30 664	27 761	7 064	283	9	7
1771	Concrete work	91	368	6 660	26 028	24 246	13 996	10 340	*1 782	618	15	14

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Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	ROCHESTER, NY MSA—Con.											
15,16, 17	Construction industries—Con.											
1781	Special trade contractors—Con.											
	Water well drilling	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(S)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	6	67	2 382	5 326	(D)	3 721	2 783	(D)	(D)	(Z)	(D)
1793	Glass and glazing work	20	275	7 278	23 568	22 865	13 932	13 393	703	(D)	8	10
1794	Excavation work	69	353	8 461	34 054	29 815	19 152	11 490	4 239	1 872	11	13
1795	Wrecking and demolition work	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c.	20	730	12 863	46 672	45 776	34 678	12 444	896	634	1	3
1799	Special trade contractors, n.e.c.	(S)	824	18 920	56 886	51 729	34 637	17 242	5 157	(S)	9	10
	SYRACUSE, NY MSA											
15,16, 17	Construction industries	1 867	13 795	360 508	1 536 864	1 176 248	733 609	475 554	360 616	18 523	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	341	1 039	16 002	92 203	72 511	34 398	39 821	19 692	692	12	18
1522	Other residential buildings	10	62	1 729	*12 416	*8 309	*2 918	5 525	*4 108	(S)	34	43
1531	Operative builders	54	248	7 501	61 466	35 287	14 952	23 095	26 179	433	22	20
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	23	393	10 110	55 669	35 516	22 207	14 202	20 153	*597	13	13
1542	Nonresidential buildings, n.e.c.	121	1 388	41 381	316 704	141 172	101 721	53 704	175 533	1 294	7	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	47	676	22 551	119 905	109 800	75 571	34 491	10 104	1 823	12	9
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	8	347	13 221	49 606	35 837	20 072	16 471	13 770	758	4	8
1623	Water, sewer, and utility lines	41	661	22 889	70 911	64 250	43 370	21 435	6 661	1 469	7	8
1629	Heavy construction, n.e.c.	53	693	22 744	89 233	76 325	50 127	27 441	12 908	1 486	7	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	211	1 767	51 016	193 210	163 244	90 272	74 217	29 966	3 273	4	5
1721	Painting and paper hanging	127	479	7 652	20 741	19 336	13 332	6 029	*1 405	(S)	12	10
1731	Electrical work	(S)	1 243	33 409	102 821	97 430	56 796	42 056	5 391	1 827	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	71	519	13 251	29 891	28 871	18 991	9 905	1 020	457	11	7
1742	Plastering, drywall, and insulation work	49	578	14 810	48 039	41 867	25 927	16 209	6 171	213	10	5
1743	Terrazzo, tile, marble, and mosaic work	(S)	96	2 456	6 871	(D)	4 472	2 275	(D)	(D)	20	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	481	9 461	34 561	31 490	18 007	13 516	3 071	*255	11	10
1752	Floor laying and other floor work	(S)	121	2 329	8 989	8 202	5 113	3 110	787	240	8	4
1761	Roofing, siding, and sheet metal work	99	649	14 748	56 638	50 507	30 145	20 694	6 131	756	11	9
1771	Concrete work	75	649	12 155	39 456	34 802	21 520	13 462	4 653	361	26	13
1781	Water well drilling	4	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	26	305	9 160	24 804	23 437	17 750	7 238	1 368	168	13	11
1793	Glass and glazing work	15	136	2 924	8 459	7 603	5 455	2 362	856	134	30	16
1794	Excavation work	(S)	222	5 053	24 101	20 754	15 939	5 707	3 347	414	13	13
1795	Wrecking and demolition work	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c.	23	272	7 042	21 797	19 916	13 552	6 390	1 881	691	7	8
1799	Special trade contractors, n.e.c.	76	739	16 243	46 037	40 835	28 736	15 564	5 202	624	14	11

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Contents

Pennsylvania

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Pennsylvania. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 87,339 establishments in this State operating in the construction industries. These establishments accounted for \$26.7 billion in total dollar value of business done.

Most of the 87,339 construction establishments were small. Of the total, 61,117 were nonemployers, and over half of the employer establishments had less than 5 employees. The 9,608 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 81 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$24.6 billion in total dollar value of business done. Of this amount, \$24.0 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$6.0 billion, leaving net value of construction work of \$18.0 billion. In addition, these establishments paid out \$8.2 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$11.2 billion. (See Introduction and appendixes for explanation of terms.)

There were 26,222 establishments with total employment averaging 213,478 during the year. Total payroll for 1992 was \$5.6 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 61,117 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$2.1 billion. Most of these establishments, about 81 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

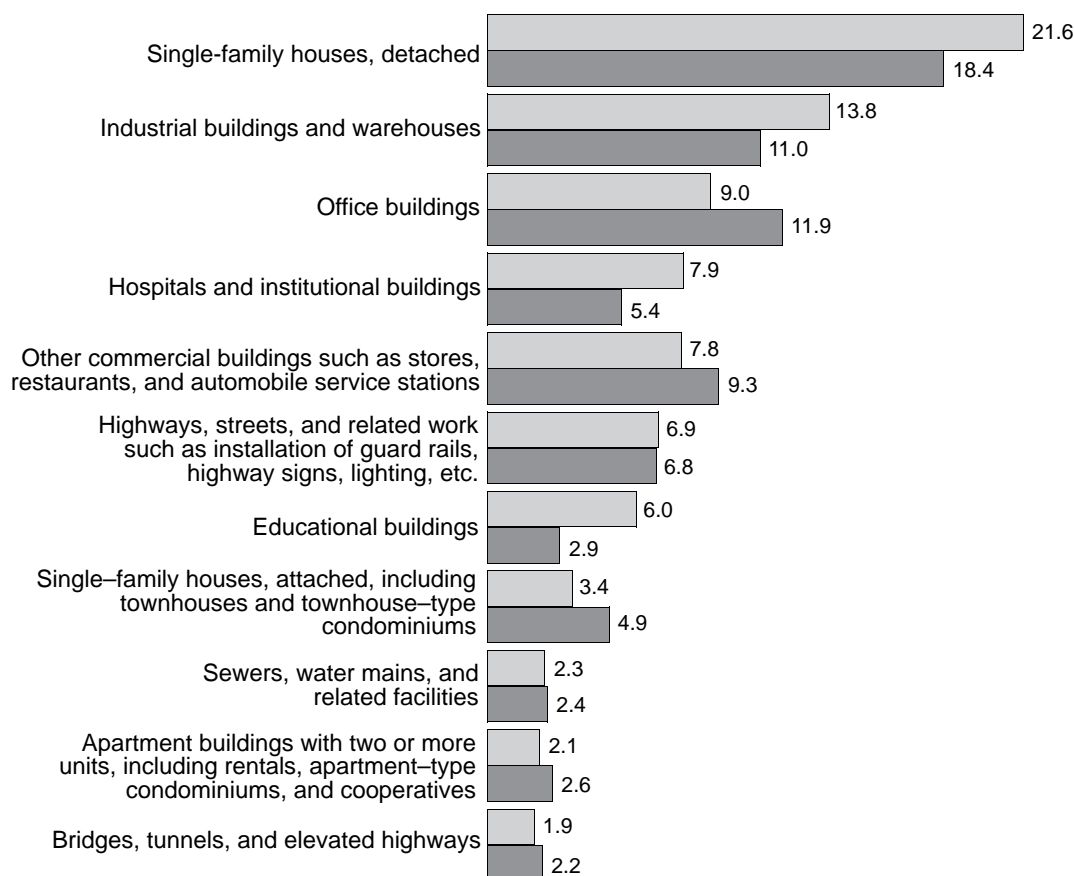



Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

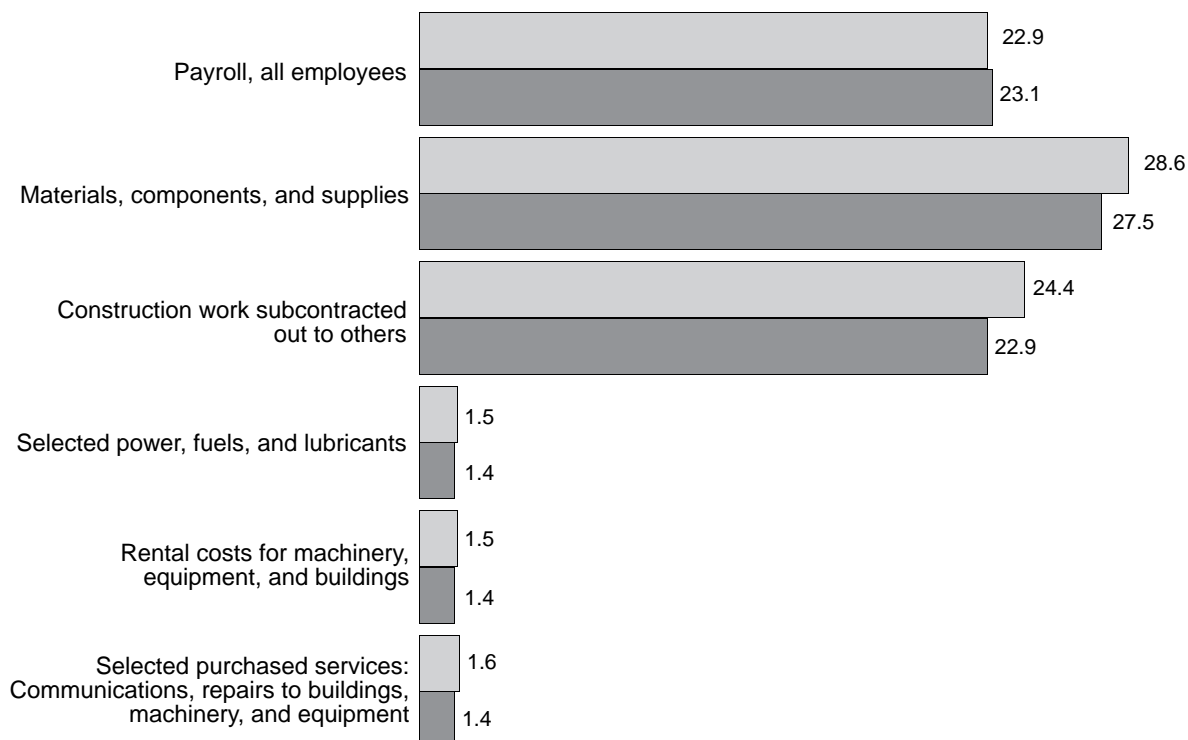


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column —	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done ¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	87 339	75 860	213 478	26 653 388	61 117	61 126	2 060 064	26 222	14 734	213 478	24 593 324	(Z)	(Z)
15	Building construction—General contractors and operative builders ----	18 822	15 021	52 835	10 416 159	10 775	10 388	707 449	8 047	4 633	52 835	9 708 710	1	1
16	Heavy construction other than building construction—contractors -----	2 030	1 096	31 670	4 075 895	647	623	29 154	1 383	(S)	31 670	4 046 741	1	1
17	Special trade contractors -----	66 487	59 744	128 973	12 161 334	49 695	50 115	1 323 461	16 792	9 629	128 973	10 837 873	1	1
1711	Plumbing, heating, and air-conditioning --	7 954	6 147	31 411	3 281 452	4 495	4 534	172 889	3 459	1 613	31 411	3 108 563	1	1
1731	Electrical work -----	6 785	5 476	20 713	1 951 323	4 510	4 495	107 089	2 275	981	20 713	1 844 234	1	1
	1987													
15, 16, 17	Construction industries ² -----	86 344	70 268	234 314	27 392 699	61 269	61 111	3 964 077	25 075	9 157	234 314	23 428 622	(Z)	1
15	Building construction—General contractors and operative builders ----	19 742	14 104	59 132	10 335 571	12 293	11 581	1 161 300	7 449	2 523	59 132	9 174 271	1	1
16	Heavy construction other than building construction—contractors -----	1 857	878	42 148	4 332 896	553	545	68 301	1 304	333	42 148	4 264 595	1	1
17	Special trade contractors -----	63 112	53 720	132 409	11 596 940	46 937	47 434	1 683 661	16 175	6 286	132 409	9 913 279	1	1
1711	Plumbing, heating, and air-conditioning --	7 592	5 685	27 660	2 601 038	4 412	4 442	218 320	3 180	1 243	27 660	2 382 718	1	2
1731	Electrical work -----	6 172	4 777	20 678	1 683 866	4 137	4 145	129 904	2 035	632	20 678	1 553 962	1	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	26 222	213 478	165 712	5 620 793	4 076 840	24 007 544	18 000 782	11 183 225
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	5 713	22 485	16 777	410 230	278 387	2 617 485	1 849 481	889 653
1522	Other residential buildings -----	185	1 377	977	(D)	19 464	228 035	137 158	(S)
1531	Operative builders -----	646	4 489	2 414	111 353	48 160	1 279 369	855 123	502 140
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	295	4 634	3 341	144 436	94 060	684 467	389 011	262 344
1542	Nonresidential buildings, n.e.c. -----	1 208	19 851	14 272	625 674	413 102	4 635 315	1 872 285	1 137 402
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	418	10 929	9 014	327 089	251 288	1 504 733	1 213 437	733 947
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	66	2 935	2 398	86 218	63 739	403 860	300 275	202 207
1623	Water, sewer, and utility lines -----	344	9 096	7 425	270 758	210 672	831 280	740 870	509 160
1629	Heavy construction, n.e.c. -----	555	8 709	6 542	268 661	185 991	1 180 417	902 839	614 028
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	3 459	31 411	23 889	934 974	696 592	3 056 292	2 669 234	1 621 444
1721	Painting and paper hanging -----	1 372	7 370	6 192	149 253	118 498	401 497	385 310	274 464
1731	Electrical work -----	2 275	20 713	15 884	616 912	453 870	1 819 016	1 760 712	1 109 643
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	1 483	9 597	8 392	206 685	168 327	587 140	554 366	373 679
1742	Plastering, drywall, and insulation work -----	607	7 713	6 664	218 224	175 132	601 997	556 155	364 189
1743	Terrazzo, tile, marble, and mosaic work -----	183	1 012	785	32 077	21 452	90 838	88 288	54 470
175	Carpentry and floor work:								
1751	Carpentry -----	1 895	7 621	6 217	145 385	114 625	544 843	481 908	291 983
1752	Floor laying and other floor work -----	446	1 899	1 359	41 313	26 774	168 936	158 565	85 283
1761	Roofing, siding, and sheet metal work -----	1 218	9 721	7 548	214 827	153 052	794 365	746 205	449 499
1771	Concrete work -----	1 158	7 347	6 195	163 767	127 115	606 263	558 776	334 940
1781	Water well drilling -----	143	675	501	16 952	12 587	62 376	(D)	37 806
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	148	2 024	1 660	55 270	42 081	175 991	162 255	115 464
1793	Glass and glazing work -----	164	1 463	989	39 425	23 816	142 877	136 575	79 231
1794	Excavation work -----	916	4 835	3 976	109 777	88 259	413 381	370 776	256 535
1795	Wrecking and demolition work -----	37	515	425	(D)	11 165	50 399	(D)	41 975
1796	Installing building equipment, n.e.c. -----	191	6 165	4 964	185 826	147 608	548 938	471 718	384 015
1799	Special trade contractors, n.e.c. -----	1 097	8 891	6 912	190 196	131 026	577 433	530 508	375 382

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
7 403 337	6 006 762	6 064 622	370 958	337 971	3 703 576	234 314	22 632 570	11 065 791	(Z)	(Z)	2	15, 16, 17
												15
997 245 58 305	768 004 90 877	87 885 (S)	23 307 (S)	26 390 (S)	262 738 (S)	21 006 3 113	2 294 671 294 118	793 325 115 171	2 10	3 11	9 (S)	152 1521 1522
410 335	424 246	13 262	4 437	7 980	104 364	5 841	(D)	368 615	5	6	7	1531
135 891 891 439	295 456 2 763 030	44 971 161 128	7 823 37 434	7 377 24 774	71 137 287 106	7 009 22 163	(D) 3 932 849	307 851 1 177 028	4 2	6 2	24 6	154 1541 1542
												16
549 884	291 296	296 866	42 620	46 448	577 964	12 701	1 654 971	882 588	2	2	4	1611
104 953 237 817 331 876	103 585 90 410 277 578	92 672 152 498 186 851	11 709 28 558 41 149	5 705 36 738 28 820	107 236 315 953 378 008	3 425 8 888 17 134	461 661 695 293 1 288 528	232 990 474 065 790 001	5 4 3	3 2 2	3 6 9	162 1622 1623 1629
												17
1 100 063	387 057	1 355 059	42 684	35 966	355 116	27 660	2 341 572	1 266 872	1	1	6	1711
114 334	16 186	169 132	8 096	4 768	60 230	8 015	400 263	300 946	4	3	20	1721
676 286	58 304	781 343	20 283	20 094	170 808	20 678	1 530 536	983 939	1	1	8	1731
182 946 198 219 36 393	32 774 45 843 2 550	388 969 433 469 66 194	8 414 6 960 875	7 178 3 486 869	80 780 46 944 12 594	11 105 11 157 976	640 805 970 380 76 729	403 016 611 532 43 035	3 2 7	2 2 6	15 13 23	174 1741 1742 1743
197 122 82 094	62 935 10 371	234 638 95 617	5 965 2 318	8 226 1 569	67 544 18 064	8 455 2 368	502 227 179 082	252 606 94 272	4 7	4 5	25 15	175 1751 1752
300 595	48 161	331 366	12 136	7 781	95 506	10 865	726 695	413 808	3	3	10	1761
230 320	47 487	342 290	14 352	12 889	156 397	7 878	538 348	302 757	3	3	10	1771
25 236	(D)	11 987	700	1 835	42 463	848	66 009	43 826	9	(D)	5	1781
49 129 68 217 123 633 8 359 100 871 191 774	13 736 6 301 42 605 (D) 77 221 46 926	100 629 85 822 228 550 19 059 140 641 231 018	5 903 2 413 14 017 1 979 11 662 13 662	*3 212 788 21 553 401 4 415 18 247	30 440 13 603 284 422 10 849 35 421 103 427	3 512 1 362 6 168 887 3 524 6 951	234 520 114 932 513 173 41 061 342 500 508 237	164 159 61 024 352 227 40 535 266 631 299 360	6 6 4 5 1 3	6 7 3 (D) 1 3	43 22 12 (Z) 8 12	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	26 222	25 075	20 613	24 340	(Z)	1	1	2
Proprietors and working partners.....	14 734	9 157	10 094	17 067	1	2	2	2
All employees**	213 478	234 314	194 058	217 238	(Z)	(Z)	1	1
Construction workers:								
March.....	145 420	165 601	134 274	148 795	(Z)	1	1	1
May	168 557	190 370	158 772	188 529	1	1	1	1
August	182 251	204 422	167 139	201 546	1	1	1	1
November.....	166 621	192 238	155 393	185 849	1	1	1	1
Average.....	165 712	188 158	156 080	181 302	(Z)	(Z)	1	1
Other employees:								
March.....	48 198	44 873	37 802	34 633	1	1	1	1
May	47 435	45 832	(NA)	(NA)	1	1	(NA)	(NA)
August	47 651	46 923	(NA)	(NA)	1	1	(NA)	(NA)
November.....	47 778	47 021	(NA)	(NA)	1	1	(NA)	(NA)
Average.....	47 765	46 162	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	5 620 793	5 400 446	3 780 060	2 921 623	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	4 076 840	3 989 315	2 929 698	2 307 389	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	1 543 953	1 411 131	850 362	614 234	1	1	(Z)	1
First-quarter payroll, all employees	1 182 709	1 147 380	827 362	581 681	1	(Z)	(Z)	(Z)
Fringe benefits, all employees	1 604 753	1 337 407	735 937	568 176	1	(Z)	(Z)	(Z)
Legally required expenditures.....	971 307	865 258	546 990	297 643	1	1	(Z)	(Z)
Voluntary expenditures.....	633 447	472 148	188 947	270 533	1	1	1	(Z)
Dollar value of business done	24 593 324	23 428 622	14 151 852	10 606 024	(Z)	1	(Z)	(Z)
Value of construction work	24 007 544	22 632 570	13 670 606	10 166 864	(Z)	1	(Z)	(Z)
Value of construction work subcontracted in from others	6 064 622	5 072 735	3 159 703	2 161 677	1	1	1	1
Other business receipts	585 780	565 207	434 875	439 160	2	2	1	1
Net value of construction†	18 000 782	17 269 813	10 716 736	8 104 608	(Z)	1	(Z)	(Z)
Value added††	11 183 225	11 065 791	7 048 422	5 112 567	1	1	(Z)	(Z)
Selected costs.....	13 410 099	12 131 986	7 057 059	5 413 755	1	1	(Z)	1
Materials, components, and supplies	7 023 558	6 435 872	3 860 118	3 170 413	1	1	1	1
Construction work subcontracted out to others	6 006 762	5 362 757	2 953 870	2 062 256	1	1	1	1
Selected power, fuels, and lubricants	379 779	333 356	243 071	181 086	1	1	1	1
Electricity.....	72 453	51 368	36 213	25 079	1	1	1	1
Natural gas	19 880	12 310	15 256	13 145	2	2	3	6
Gasoline and diesel fuel	264 593	248 698	174 254	117 737	1	1	1	1
On highway use.....	197 640	186 904	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use.....	66 954	61 793	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases.....	22 852	20 979	17 346	25 127	3	2	2	2
Rental cost for machinery, equipment, and buildings	370 958	318 060	188 346	133 566	1	1	1	1
For machinery and equipment	249 749	228 738	136 972	112 217	2	1	1	1
For buildings.....	121 209	89 322	51 374	21 350	2	2	2	1
Selected purchased services	388 898	328 082	218 594	186 217	1	1	1	1
Communication services	118 943	94 740	61 054	42 828	2	1	1	2
Repairs to buildings and other structures	26 416	23 090	15 540	10 928	4	3	3	3
Repairs to machinery and equipment	243 539	210 250	142 000	132 461	2	1	1	1
Ownership of construction projects:								
Value of construction work	24 007 544	22 632 570	13 670 606	10 166 864	(Z)	1	(Z)	(Z)
Government owned	5 640 273	3 998 631	2 547 396	1 878 659	1	1	2	(Z)
Federal	992 353	894 746	(NA)	(NA)	3	3	(NA)	(NA)
State and local	4 647 920	3 103 884	(NA)	(NA)	1	1	(NA)	(NA)
Privately owned	18 367 271	18 633 938	11 123 209	8 288 205	1	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	3 517 453	2 348 517	1	2
Capital expenditures, other than land -----	337 971	427 950	2	2
New -----	263 830	354 558	2	2
Used -----	74 141	73 391	4	3
Retirements and disposition of depreciable assets -----	151 849	88 443	5	4
End-of-year gross book value of depreciable assets -----	3 703 576	2 688 025	1	1
Depreciation charges during year -----	379 894	325 828	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	583 843	511 459	4	4
Capital expenditures, other than land -----	52 174	67 964	5	4
New buildings and other structures -----	41 849	52 113	6	5
Used buildings and other structures -----	10 325	15 850	11	8
Retirements and disposition of depreciable assets -----	9 178	16 040	6	9
End-of-year gross book value of depreciable assets -----	626 839	563 383	4	3
Depreciation charges during year -----	40 787	46 650	5	4
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	2 933 610	1 837 058	1	2
Capital expenditures, other than land -----	285 797	359 986	2	2
New machinery and equipment, including automobiles and trucks -----	221 981	302 444	2	2
New automobiles and trucks, intended primarily for highway use -----	91 057	140 783	4	3
Used machinery and equipment, including automobiles and trucks -----	63 816	57 541	5	4
Retirements and disposition of depreciable assets -----	142 670	72 403	5	4
End-of-year gross book value of depreciable assets -----	3 076 737	2 124 641	1	2
Depreciation charges during year -----	339 107	279 177	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	26 222	(Z)
Value of construction work	24 007 544	(Z)
Establishments with inventories:		
Number	7 817	2
Value of construction work	10 330 430	1
Inventories ¹ :		
End of 1992, materials and supplies	348 521	7
End of 1991, materials and supplies	327 673	5
Establishments with no inventories:		
Number	10 045	2
Value of construction work	8 829 078	1
Establishments not reporting:		
Number	8 360	1
Value of construction work	4 848 037	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	26 222	16 613	5 116	2 432	1 448	400	167	29	14	2	
All employees** -----	213 478	31 750	32 064	32 093	42 175	27 426	25 748	9 922	12 301	(D)	
Payroll, all employees -----	5 620 793	524 276	650 927	797 369	1 192 232	882 040	819 215	330 463	424 270	(D)	
Dollar value of business done -----	24 593 324	3 084 048	2 860 625	3 293 890	4 952 707	3 723 700	3 837 347	1 307 917	1 533 090	(D)	
Value of construction work -----	24 007 544	3 050 452	2 810 299	3 213 706	4 837 911	3 628 467	3 713 973	1 237 368	1 515 368	(D)	
Net value of construction work† -----	18 000 782	2 562 323	2 321 479	2 534 932	3 597 550	2 583 341	2 485 404	936 261	979 492	(D)	
Value added†† -----	11 183 225	1 459 972	1 352 344	1 547 387	2 213 729	1 630 708	1 702 929	611 245	664 912	(D)	
Cost of materials, components, supplies, and fuels -----	7 403 337	1 135 946	1 019 461	1 067 730	1 498 618	1 047 866	905 849	395 565	332 302	(D)	
Cost of construction work subcontracted out to others -----	6 006 762	488 130	488 820	678 774	1 240 361	1 045 126	1 228 569	301 107	535 876	(D)	
Rental cost for machinery, equipment, and buildings -----	370 958	34 518	38 177	48 298	78 696	64 570	54 448	26 102	26 149	(D)	
Capital expenditures, other than land -----	337 971	48 452	47 600	42 871	58 795	45 292	48 389	27 681	18 890	(D)	
End-of-year gross book value of depreciable assets -----	3 703 576	504 712	461 094	541 580	769 296	509 235	537 813	282 351	97 495	(D)	
1987											
All employees** -----	234 314	(S)	33 481	35 522	44 425	26 077	28 726	12 618	8 901	14 788	
Value of construction work -----	22 632 570	(S)	2 506 320	3 164 929	4 663 040	2 945 300	5 075 729	(D)	1 797 249	(D)	
Value added†† -----	11 065 791	(S)	1 210 036	1 489 866	2 144 950	1 412 185	1 642 945	962 156	390 875	672 519	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	2	3	3	2	(Z)	(Z)	(Z)	(Z)	(D)	
Net value of construction work† -----	(Z)	3	3	3	1	(Z)	(Z)	(Z)	(Z)	(D)	
Capital expenditures, other than land -----	2	7	10	7	3	(Z)	(Z)	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	26 222	(S)	(S)	3 967	7 885	4 529	3 271	2 239	840	457	358
All employees** -----	213 478	(S)	(S)	6 085	21 083	21 312	26 730	34 275	24 297	24 368	52 533
Payroll, all employees -----	5 620 793	(S)	(S)	69 659	312 094	391 570	581 672	879 731	716 393	757 230	1 889 619
Dollar value of business done -----	24 593 324	(S)	(S)	292 555	1 277 647	1 574 053	2 260 600	3 467 271	2 922 893	3 152 440	9 569 857
Value of construction work -----	24 007 544	(S)	(S)	289 678	1 261 304	1 551 816	2 229 986	3 385 686	2 857 103	3 089 868	9 266 563
Net value of construction work† -----	18 000 782	(S)	(S)	270 444	1 168 910	1 386 540	1 903 981	2 801 894	2 266 184	2 378 387	5 752 733
Value added†† -----	11 183 225	(S)	(S)	163 619	695 769	806 850	1 149 043	1 689 077	1 381 355	1 490 596	3 762 575
Cost of materials, components, supplies, and fuels -----	7 403 337	(S)	(S)	109 702	489 484	601 927	785 552	1 194 402	950 620	950 362	2 293 452
Cost of construction work subcontracted out to others -----	6 006 762	(S)	(S)	19 234	92 394	165 276	326 004	583 792	590 919	711 481	3 513 830
Rental cost for machinery, equipment, and buildings -----	370 958	(S)	(S)	4 302	15 076	22 253	36 073	54 150	44 289	61 476	132 714
Capital expenditures, other than land -----	337 971	(S)	(S)	7 470	25 877	27 057	38 768	50 162	38 454	35 616	113 310
End-of-year gross book value of depreciable assets -----	3 703 576	(S)	(S)	60 466	248 868	250 622	467 539	613 898	422 417	507 602	1 115 525
1987											
All employees** -----	234 314	(S)	(S)	(S)	(S)	22 989	26 080	37 122	27 138	23 326	64 710
Value of construction work -----	22 632 570	(S)	(S)	(S)	(S)	1 452 052	1 851 566	3 316 968	2 910 610	2 651 500	8 916 343
Value added†† -----	11 065 791	(S)	(S)	(S)	(S)	768 077	960 153	1 660 830	1 403 029	1 237 784	4 176 039
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	(S)	(S)	5	3	4	3	2	1	1	(Z)
Net value of construction work† -----	(Z)	(S)	(S)	4	3	4	3	3	2	2	(Z)
Capital expenditures, other than land -----	2	(S)	(S)	15	11	11	11	7	3	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	24 007 544	12 898 448	6 870 548	3 655 462	(Z)	1	1	1
Building construction	18 258 740	10 383 122	5 458 220	2 417 398	1	1	1	1
Single-family houses	6 001 108	4 070 009	1 260 768	670 331	2	2	3	3
Single-family houses, detached	5 190 115	3 517 181	1 111 355	561 579	2	3	3	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	810 994	552 828	149 413	108 752	4	6	7	7
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	515 293	236 269	160 570	118 454	4	4	8	6
Other residential buildings, including hotels, motels, and tourist cabins	208 336	84 890	91 347	32 099	4	6	6	8
Office buildings	2 150 055	1 068 297	817 954	263 804	2	2	2	2
Other commercial buildings such as stores, restaurants, and automobile service stations	1 865 580	995 909	573 774	295 897	2	3	3	4
Industrial buildings and warehouses	3 315 444	1 594 808	1 036 447	684 188	1	2	2	1
Industrial buildings	2 816 267	1 307 879	884 415	623 973	1	2	2	1
Warehouses	499 177	286 929	152 032	60 215	4	4	11	4
Religious buildings	287 888	139 588	102 532	45 767	3	5	4	8
Educational buildings	1 440 756	736 144	577 228	127 384	2	1	3	6
Hospitals and institutional buildings	1 896 751	1 052 328	724 450	119 973	1	1	1	2
Farm buildings, nonresidential	143 643	100 543	14 660	28 440	5	4	11	21
Amusement, social, and recreational buildings, indoors	107 574	66 518	27 478	13 578	4	6	4	4
Other nonresidential buildings	326 313	237 820	71 011	17 482	2	2	7	13
Nonbuilding construction	5 165 718	2 515 326	1 412 328	1 238 064	1	1	1	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 664 847	708 599	523 731	432 517	2	2	2	4
Private driveways and parking areas	182 242	86 902	33 076	62 264	6	7	6	8
Bridges, tunnels, and elevated highways	458 629	189 355	189 860	79 414	2	6	(Z)	4
Conservation and development construction	188 258	111 980	42 282	33 996	4	6	4	1
Power and communication transmission lines, towers, and related facilities	436 984	219 662	72 568	144 754	3	5	4	3
Sewers, water mains, and related facilities	561 738	364 273	113 802	83 663	3	3	7	9
Sewers, sewer lines, septic systems, and related facilities	328 045	216 357	63 567	48 121	3	4	8	10
Water mains and related facilities	233 692	147 916	50 235	35 541	4	4	7	14
Pipeline construction other than sewer or water lines	169 789	108 494	30 876	30 418	6	4	9	17
Blast furnaces, petroleum refineries, chemical complexes, etc.	401 487	143 956	84 605	172 926	1	1	6	2
Power plants	272 828	73 281	71 881	127 766	1	2	4	1
Sewage treatment and water treatment plants	397 954	271 027	112 436	14 390	2	2	3	10
Sewage treatment plants	269 010	169 812	93 472	5 725	3	3	3	16
Water treatment plants	128 844	101 215	18 964	8 665	2	1	6	7
Other nonbuilding construction	430 962	237 796	137 212	55 955	4	5	5	6
Construction work, n.s.k.	583 085	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1987								
Value of construction work	22 632 570	13 455 428	5 601 811	2 643 440	1	1	1	1
Building construction	16 161 284	10 461 834	3 893 610	1 805 842	1	1	1	1
Single-family houses	5 271 472	3 865 930	904 597	500 945	2	2	3	3
Single-family houses, detached	4 154 983	2 939 358	791 082	424 543	2	3	3	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	1 116 489	926 571	113 515	76 402	5	5	13	7
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	579 846	352 845	135 371	91 629	3	5	5	5
Other residential buildings, including hotels, motels, and tourist cabins	549 774	368 894	114 823	66 055	3	3	7	7
Office buildings	2 699 231	1 808 624	638 534	252 072	1	2	2	5
Other commercial buildings such as stores, restaurants, and automobile service stations	2 096 707	1 283 824	590 182	222 701	1	2	3	3
Industrial buildings and warehouses	2 490 260	1 479 629	601 072	409 558	1	1	2	2
Industrial buildings	1 930 265	1 048 141	514 340	367 782	1	1	2	2
Warehouses	559 995	431 487	86 731	41 776	3	3	3	4
Religious buildings	248 334	140 266	71 588	36 479	3	5	5	5
Educational buildings	650 095	305 606	270 842	73 645	1	1	2	4
Hospitals and institutional buildings	1 220 501	686 381	435 213	98 906	1	2	2	2
Farm buildings, nonresidential	80 299	48 541	20 092	11 666	15	22	23	8
Amusement, social, and recreational buildings, indoors	100 871	41 231	49 330	10 310	5	7	8	10
Other nonresidential buildings	173 894	80 063	61 966	31 876	9	6	21	15
Nonbuilding construction	5 539 394	2 993 594	1 708 201	837 598	1	1	1	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 543 541	683 814	592 575	267 151	2	3	1	4
Private driveways and parking areas	169 328	106 294	30 116	32 917	7	7	10	11
Bridges, tunnels, and elevated highways	502 242	257 725	181 361	63 154	2	1	1	10
Power and communication transmission lines, towers, and related facilities	382 905	198 187	100 993	83 724	2	2	2	2
Sewers, water mains, and related facilities	532 387	425 416	60 352	46 618	3	3	4	7
Sewers, sewer lines, septic systems, and related facilities	343 488	277 260	39 104	27 122	3	4	4	5
Water mains and related facilities	188 899	148 155	21 247	19 496	4	4	8	15
Pipeline construction other than sewer or water lines	109 635	77 499	13 871	18 264	3	3	4	9
Blast furnaces, petroleum refineries, chemical complexes, etc.	373 353	108 256	215 649	49 447	1	1	1	4
Power plants	1 028 383	557 419	332 772	138 191	(Z)	1	(Z)	1
Sewage treatment and water treatment plants	309 892	196 164	69 202	44 526	3	4	4	5
Sewage treatment plants	150 243	115 385	(D)	(D)	5	6	(D)	(D)
Water treatment plants	159 649	80 778	(D)	(D)	1	1	(D)	(D)
Other nonbuilding construction	587 728	382 819	111 310	93 605	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	931 891	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	26 222	165 712	145 420	168 557	182 251	166 621	(Z)	(Z)	(Z)	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	5 713	16 777	14 987	17 443	18 474	16 204	2	2	2	2	3	3
1522	Other residential buildings -----	185	977	913	980	1 081	933	14	10	10	9	11	11
1531	Operative builders -----	646	2 414	2 252	2 443	2 576	2 385	7	6	6	5	6	6
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	295	3 341	3 158	3 364	3 377	3 465	10	4	4	5	5	5
1542	Nonresidential buildings, n.e.c. ---	1 208	14 272	13 645	14 163	15 496	13 784	5	2	2	3	3	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	418	9 014	5 648	10 049	11 046	9 312	7	2	3	2	2	2
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	66	2 398	1 524	2 620	2 941	2 505	6	6	7	4	5	8
1623	Water, sewer, and utility lines -----	344	7 425	5 696	7 551	7 933	8 520	8	4	4	4	4	5
1629	Heavy construction, n.e.c. -----	555	6 542	5 506	6 920	7 163	6 580	7	3	3	3	3	3
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	3 459	23 889	22 337	23 463	25 424	24 331	1	1	1	1	1	1
1721	Painting and paper hanging -----	1 372	6 192	4 938	6 222	7 417	6 192	3	4	4	4	4	4
1731	Electrical work -----	2 275	15 884	15 629	15 518	16 588	15 801	2	2	1	2	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	1 483	8 392	7 031	8 739	9 350	8 447	3	3	3	3	3	3
1742	Plastering, drywall, and insulation work -----	607	6 664	6 413	6 769	7 091	6 381	4	2	2	2	2	2
1743	Terrazzo, tile, marble, and mosaic work -----	183	785	734	774	883	750	10	6	7	6	6	6
175	Carpentry and floor work:												
1751	Carpentry -----	1 895	6 217	5 721	6 248	6 803	6 098	3	4	4	4	4	4
1752	Floor laying and other floor work --	446	1 359	1 272	1 336	1 473	1 356	4	7	8	7	7	9
1761	Roofing, siding, and sheet metal work -----	1 218	7 548	6 389	7 635	8 235	7 932	3	3	3	3	3	3
1771	Concrete work -----	1 158	6 195	4 378	6 724	7 160	6 518	4	3	4	3	3	3
1781	Water well drilling -----	143	501	480	499	520	505	8	9	9	9	9	9
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	148	1 660	1 501	1 559	1 895	1 684	15	5	4	4	5	11
1793	Glass and glazing work -----	164	989	986	973	1 023	973	11	7	7	7	8	7
1794	Excavation work -----	916	3 976	3 441	4 139	4 420	3 904	5	4	5	4	4	4
1795	Wrecking and demolition work -----	37	425	386	437	465	413	8	4	4	4	5	5
1796	Installing building equipment, n.e.c. -----	191	4 964	5 041	4 822	4 872	5 119	10	1	1	1	1	1
1799	Special trade contractors, n.e.c. ---	1 097	6 912	5 411	7 167	8 543	6 530	5	4	3	3	3	6

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.1	26.3	144.9	.234	.308	.250	.253	.015
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.9	18.2	156.0	.157	.381	.293	.034	.009
1522	Other residential buildings -----	7.4	(D)	233.4	(D)	.256	.399	(S)	(S)
1531	Operative builders -----	7.0	24.8	530.0	.087	.321	.332	.010	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	15.7	31.2	204.9	.211	.199	.432	.066	.011
1542	Nonresidential buildings, n.e.c. -----	16.4	31.5	324.8	.135	.192	.596	.035	.008
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	26.1	29.9	166.9	.217	.365	.194	.197	.028
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	44.8	29.4	168.4	.213	.260	.256	.229	.029
1623	Water, sewer, and utility lines -----	26.5	29.8	112.0	.326	.286	.109	.183	.034
1629	Heavy construction, n.e.c. -----	15.7	30.8	180.4	.228	.281	.235	.158	.035
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	9.1	29.8	127.9	.306	.360	.127	.443	.014
1721	Painting and paper hanging -----	5.4	20.3	64.8	.372	.285	.040	.421	.020
1731	Electrical work -----	9.1	29.8	114.5	.339	.372	.032	.430	.011
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6.5	21.5	70.0	.352	.312	.056	.662	.014
1742	Plastering, drywall, and insulation work -----	12.7	28.3	90.3	.363	.329	.076	.720	.012
1743	Terrazzo, tile, marble, and mosaic work -----	5.5	31.7	115.7	.353	.401	.028	.729	.010
175	Carpentry and floor work:								
1751	Carpentry -----	4.0	19.1	87.6	.267	.362	.116	.431	.011
1752	Floor laying and other floor work -----	4.3	21.8	124.3	.245	.486	.061	.566	.014
1761	Roofing, siding, and sheet metal work -----	8.0	22.1	105.2	.270	.378	.061	.417	.015
1771	Concrete work -----	6.3	22.3	97.9	.270	.380	.078	.565	.024
1781	Water well drilling -----	4.7	25.1	124.5	.272	.405	(D)	.192	.011
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	13.7	27.3	106.0	.314	.279	.078	.572	.034
1793	Glass and glazing work -----	8.9	26.9	144.5	.276	.477	.044	.601	.017
1794	Excavation work -----	5.3	22.7	104.0	.266	.299	.103	.553	.034
1795	Wrecking and demolition work -----	13.9	(D)	118.6	(D)	.166	(D)	.378	.039
1796	Installing building equipment, n.e.c. -----	32.2	30.1	110.6	.339	.184	.141	.256	.021
1799	Special trade contractors, n.e.c. -----	8.1	21.4	83.5	.329	.332	.081	.400	.024

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA											
15,16, 17	Construction industries	42 350	293 351	9 218 472	37 414 756	28 282 143	18 392 725	10 662 353	9 132 613	369 395	(Z)	(Z)
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	7 113	21 794	432 130	2 472 841	1 798 370	985 496	848 216	674 471	20 780	2	3
1522	Other residential buildings	835	5 490	153 426	927 370	551 355	337 646	224 493	376 015	4 926	5	6
1531	Operative builders	1 018	6 282	181 447	2 108 389	1 398 163	896 224	583 977	710 226	10 621	4	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	473	6 777	228 107	1 478 248	721 385	485 489	256 717	756 863	6 091	3	3
1542	Nonresidential buildings, n.e.c.	2 184	25 875	942 296	6 760 487	2 879 876	1 837 012	1 345 434	3 880 610	31 176	2	1
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	648	11 541	420 833	1 779 832	1 448 854	921 211	565 867	330 978	42 479	2	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	78	4 397	198 889	823 663	632 063	445 470	199 490	191 600	10 308	1	1
1623	Water, sewer, and utility lines	466	9 358	355 962	1 249 484	1 065 185	789 931	296 065	184 299	27 771	2	2
1629	Heavy construction, n.e.c.	676	10 703	438 031	1 750 592	1 442 084	1 059 465	466 715	308 508	29 103	2	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	6 509	42 500	1 392 063	4 696 119	4 054 819	2 482 719	1 610 349	641 300	44 984	1	1
1721	Painting and paper hanging	2 460	11 826	280 880	750 105	701 211	534 363	171 438	48 895	9 868	3	2
1731	Electrical work	5 212	42 806	1 529 521	4 135 160	3 952 544	2 587 075	1 383 066	182 616	29 419	1	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	1 740	8 920	215 431	720 061	626 354	420 524	210 129	93 707	6 858	3	3
1742	Plastering, drywall, and insulation work	959	11 663	399 161	1 061 626	954 210	670 604	289 450	107 416	9 942	3	2
1743	Terrazzo, tile, marble, and mosaic work	560	2 518	72 380	227 457	212 009	135 777	78 384	15 448	2 410	8	7
175	Carpentry and floor work:											
1751	Carpentry	3 414	12 366	283 674	1 082 162	945 907	562 093	401 491	136 255	(S)	3	4
1752	Floor laying and other floor work	756	3 529	94 519	358 405	320 221	190 894	138 062	38 184	(S)	3	5
1761	Roofing, siding, and sheet metal work	1 817	10 839	307 237	976 792	882 317	563 423	324 331	94 475	12 679	2	2
1771	Concrete work	1 218	7 659	190 507	639 068	591 850	359 217	241 033	47 218	9 701	7	4
1781	Water well drilling	127	694	21 589	78 340	73 778	45 316	28 540	4 562	1 335	7	6
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	275	3 229	117 785	365 864	324 796	239 101	88 923	41 068	2 428	5	2
1793	Glass and glazing work	403	2 449	67 938	215 385	204 561	122 457	89 496	10 823	1 744	5	4
1794	Excavation work	926	4 876	140 467	476 199	427 018	302 804	134 726	49 181	20 201	4	5
1795	Wrecking and demolition work	90	1 668	38 783	141 649	126 897	106 930	23 890	14 752	1 945	2	3
1796	Installing building equipment, n.e.c.	339	7 802	311 525	841 241	792 198	565 583	228 917	49 042	4 371	1	(Z)
1799	Special trade contractors, n.e.c.	2 056	15 790	403 891	1 298 219	1 154 116	745 902	433 154	144 102	16 943	3	3
	Bergen–Passaic, NJ PMSA											
15,16, 17	Construction industries	3 805	27 827	877 468	3 341 538	2 675 177	1 825 453	968 390	666 362	32 405	1	1
	(See appropriate State for SIC detail.)											
	Bridgeport, CT PMSA											
15,16, 17	Construction industries	1 032	5 940	178 098	698 909	529 942	347 931	194 890	168 967	8 091	3	3
	(See appropriate State for SIC detail.)											
	Danbury, CT PMSA											
15,16, 17	Construction industries	710	3 255	98 901	453 931	324 836	195 875	133 634	129 095	6 059	4	4
	(See appropriate State for SIC detail.)											
	Dutchess County, NY PMSA											
15,16, 17	Construction industries	742	4 096	114 520	489 015	375 227	231 309	156 061	113 789	6 023	5	6
	(See appropriate State for SIC detail.)											

PA–14 PENNSYLVANIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.											
	Jersey City, NJ PMSA											
15,16, 17	Construction industries ----- (See appropriate State for SIC detail.)	776	5 896	188 387	674 560	558 706	369 589	196 350	115 854	5 989	3	4
	Middlesex–Somerset–Hunterdon, NJ PMSA											
15,16, 17	Construction industries ----- (See appropriate State for SIC detail.)	2 765	19 015	604 438	2 620 186	2 000 280	1 247 470	789 895	619 906	29 971	1	2
	Monmouth–Ocean, NJ PMSA											
15,16, 17	Construction industries ----- (See appropriate State for SIC detail.)	2 725	15 377	418 295	2 128 055	1 594 996	1 004 473	631 216	533 059	25 342	2	3
	Nassau–Suffolk, NY PMSA											
15,16, 17	Construction industries ----- (See appropriate State for SIC detail.)	8 068	44 952	1 224 727	4 994 826	3 872 198	2 440 215	1 491 173	1 122 629	54 762	1	1
	New Haven–Meriden, CT PMSA											
15,16, 17	Construction industries ----- (See appropriate State for SIC detail.)	1 351	9 080	282 141	1 101 261	864 400	532 933	350 990	236 861	(S)	3	2
	New York, NY PMSA											
15,16, 17	Construction industries ----- (See appropriate State for SIC detail.)	12 358	109 208	3 729 636	14 477 032	10 612 957	7 104 953	3 877 610	3 864 074	119 089	1	1
	Newark, NJ PMSA											
15,16, 17	Construction industries ----- (See appropriate State for SIC detail.)	4 737	30 728	994 606	3 889 810	3 123 797	2 026 165	1 151 210	766 012	46 706	1	1
	Newburgh, NY–PA PMSA											
15,16, 17	Construction industries -----	1 035	3 891	101 839	415 465	350 342	206 446	146 555	65 123	6 561	3	4
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	(S)	(S)	(S)	55 551	(D)	(S)	29 408	(D)	(S)	(S)	(D)
1522	Other residential buildings -----	(S)	*43	*748	*4 662	*3 717	*2 456	*1 261	(S)	(D)	47	47
1531	Operative builders -----	(S)	145	(S)	47 630	32 840	21 406	12 104	14 790	(S)	23	26
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	3	28	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1542	Nonresidential buildings, n.e.c. -----	37	158	4 229	17 836	(D)	7 032	(S)	(D)	(S)	17	(D)
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines -----	27	236	11 395	30 462	28 990	22 392	6 625	1 472	(D)	10	5
1629	Heavy construction, n.e.c. -----	19	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(S)	(S)	(D)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

PENNSYLVANIA PA–15

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16,17	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.											
	Newburgh, NY—PA PMSA—Con.											
	Construction industries—Con.											
	Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning -----	119	460	12 079	52 146	48 453	26 150	23 121	3 692	(S)	9	8
	1721 Painting and paper hanging -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1731 Electrical work -----	101	635	19 349	47 659	46 760	28 744	18 054	898	892	7	7
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work -----	75	188	4 118	14 129	13 748	10 025	3 726	381	(S)	23	25
	1742 Plastering, drywall, and insulation work -----	(S)	(S)	(S)	2 872	2 201	(S)	(D)	671	(S)	(S)	(Z)
	1743 Terrazzo, tile, marble, and mosaic work -----	*16	*48	*834	*3 436	*3 356	*1 914	*1 460	80	—	62	57
	175 Carpentry and floor work:											
	1751 Carpentry -----	98	208	4 560	21 648	17 027	9 085	8 047	4 620	144	12	18
	1752 Floor laying and other floor work -----	22	80	1 920	7 889	7 277	4 472	2 897	612	(D)	19	13
	1761 Roofing, siding, and sheet metal work -----	44	106	1 979	6 151	5 787	3 775	2 069	(S)	(D)	20	19
	1771 Concrete work -----	(S)	(S)	(S)	(S)	11 499	(S)	4 703	(S)	(S)	(S)	10
	1781 Water well drilling -----	(S)	(S)	(D)	(S)	(S)	(S)	(S)	29	113	(S)	(S)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection -----	4	(D)	(D)	(D)	(D)	(D)	66	(D)	—	(D)	(D)
	1793 Glass and glazing work -----	2	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
	1794 Excavation work -----	75	224	4 608	18 027	17 419	12 592	4 939	608	*660	25	27
	1795 Wrecking and demolition work -----	—	—	—	—	—	—	—	—	—	—	—
	1796 Installing building equipment, n.e.c. -----	(S)	(S)	(D)	(D)	(D)	(D)	(S)	(D)	(D)	(S)	(D)
	1799 Special trade contractors, n.e.c. -----	42	280	7 891	(D)	(D)	14 716	8 505	(D)	361	16	(D)
15,16,17	Stamford—Norwalk, CT PMSA											
	Construction industries -----	987	6 211	183 104	1 076 075	620 111	355 313	276 985	455 964	(S)	2	3
	(See appropriate State for SIC detail.)											
15,16,17	Trenton, NJ PMSA											
	Construction industries -----	691	4 984	137 822	746 410	524 888	345 956	195 957	221 522	5 847	2	1
	(See appropriate State for SIC detail.)											
15,16,17	Waterbury, CT PMSA											
	Construction industries -----	569	2 891	84 490	307 681	254 285	158 646	101 436	53 396	4 683	6	6
	(See appropriate State for SIC detail.)											
15,16,17	PHILADELPHIA—WILMINGTON—ATLANTIC CITY, PA—NJ—DE—MD CMSA											
	Construction industries -----	13 010	105 943	3 072 558	12 663 461	9 443 230	6 052 455	3 736 651	3 220 232	163 018	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	2 309	8 868	182 063	1 032 402	732 371	377 108	369 480	300 031	7 495	3	4
1522	Other residential buildings -----	97	1 003	29 588	139 771	82 251	57 972	27 975	57 520	499	13	10
1531	Operative builders -----	366	2 767	77 295	985 023	632 627	419 108	278 463	352 396	5 653	4	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	165	2 943	100 243	449 964	246 674	194 050	61 968	203 290	3 201	5	7
1542	Nonresidential buildings, n.e.c. -----	589	7 924	272 380	2 114 457	746 560	474 380	373 287	1 367 897	6 458	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	175	4 978	161 333	787 298	643 901	401 973	274 208	143 396	25 540	2	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	25	437	21 230	99 544	63 031	47 054	17 364	36 513	939	7	4
1623	Water, sewer, and utility lines -----	168	5 868	211 645	587 661	525 255	389 636	138 175	62 406	21 085	2	2
1629	Heavy construction, n.e.c. -----	226	3 526	126 055	527 677	419 197	285 302	150 112	108 480	16 971	5	3

PA—16 PENNSYLVANIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 828	16 046	510 888	1 681 450	1 441 079	849 431	629 554	240 371	17 100	2	2
1721	Painting and paper hanging	736	3 720	83 383	215 610	202 389	147 992	54 856	13 221	2 282	5	3
1731	Electrical work	1 346	11 310	372 617	1 078 973	1 036 199	670 112	381 387	42 774	12 375	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	639	4 460	110 528	307 555	292 198	194 808	97 827	15 357	3 402	4	4
1742	Plastering, drywall, and insulation work	281	2 746	76 553	221 158	199 875	129 583	73 567	21 284	1 451	4	5
1743	Terrazzo, tile, marble, and mosaic work	135	689	21 628	66 679	(D)	38 736	23 791	(D)	613	6	(D)
175	Carpentry and floor work:											
1751	Carpentry	986	4 346	93 612	361 174	289 994	173 571	118 488	71 180	3 280	5	7
1752	Floor laying and other floor work	263	1 166	28 190	114 342	104 567	53 392	56 511	9 775	999	7	5
1761	Roofing, siding, and sheet metal work	761	4 776	122 776	422 154	385 206	240 706	147 007	36 948	3 285	4	4
1771	Concrete work	672	4 801	112 339	391 724	354 987	211 219	147 824	36 738	7 322	4	4
1781	Water well drilling	45	316	8 685	30 873	(D)	17 797	9 789	(D)	432	7	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	89	1 974	51 920	158 925	138 188	93 524	48 807	20 737	2 078	2	2
1793	Glass and glazing work	110	866	24 974	91 016	86 079	49 478	41 391	4 937	307	9	8
1794	Excavation work	327	1 758	47 872	178 380	152 688	101 472	54 614	25 692	6 055	5	5
1795	Wrecking and demolition work	22	509	14 647	48 788	46 464	37 872	11 275	2 323	994	9	6
1796	Installing building equipment, n.e.c. ..	83	2 518	78 817	210 002	199 795	159 027	45 521	10 207	1 938	2	2
1799	Special trade contractors, n.e.c.	568	5 628	131 296	360 864	331 742	237 151	103 409	29 121	11 264	4	4
	Atlantic–Cape May, NJ PMSA											
15,16, 17	Construction industries	1 032	6 001	176 618	722 675	591 515	367 391	239 927	131 160	7 973	2	2
	(See appropriate State for SIC detail.)											
	Philadelphia, PA–NJ PMSA											
15,16, 17	Construction industries	10 203	84 254	2 477 200	10 256 615	7 564 572	4 872 495	2 991 358	2 692 042	128 446	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 757	6 743	135 123	777 659	555 636	288 529	280 299	222 024	4 886	4	5
1522	Other residential buildings	73	650	(S)	95 046	56 963	36 998	20 800	38 083	(D)	20	14
1531	Operative builders	272	2 139	64 152	809 734	511 808	339 033	233 120	297 927	4 998	5	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	121	2 151	74 362	340 955	189 624	151 469	41 585	151 332	2 288	5	9
1542	Nonresidential buildings, n.e.c.	476	6 594	232 019	1 821 752	604 375	387 651	311 457	1 217 378	5 394	2	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	131	3 291	107 824	525 647	424 446	272 402	176 453	101 201	13 726	3	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	14	(D)	10 827	65 458	34 933	26 375	8 579	30 525	446	(D)	2
1623	Water, sewer, and utility lines	132	4 272	155 204	436 357	395 587	293 959	104 016	40 771	18 391	3	2
1629	Heavy construction, n.e.c.	187	3 123	112 524	472 894	375 595	252 814	133 843	97 299	15 779	6	3

CONSTRUCTION—GEOGRAPHIC AREA SERIES

PENNSYLVANIA PA–17

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.											
	Philadelphia, PA–NJ PMSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 504	12 990	424 811	1 399 531	1 200 386	700 218	533 334	199 145	14 130	2	2
1721	Painting and paper hanging	538	2 948	68 745	179 390	168 791	121 910	47 282	10 599	1 596	5	4
1731	Electrical work	1 079	9 170	304 542	873 198	835 096	545 676	303 721	38 103	10 192	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	499	3 517	90 200	246 781	232 816	155 819	77 330	13 964	2 535	5	5
1742	Plastering, drywall, and insulation work	214	2 206	63 391	186 516	167 660	109 489	60 532	18 856	1 175	5	5
1743	Terrazzo, tile, marble, and mosaic work	(S)	492	15 912	44 831	44 314	26 911	17 570	517	270	8	6
175	Carpentry and floor work:											
1751	Carpentry	788	3 505	78 888	306 136	242 050	146 864	97 030	64 086	2 761	6	9
1752	Floor laying and other floor work	206	976	24 145	96 705	(D)	45 836	47 655	(D)	870	8	(D)
1761	Roofing, siding, and sheet metal work	608	3 816	97 174	350 260	316 233	197 949	120 353	34 027	2 730	5	4
1771	Concrete work	523	3 780	91 333	321 275	292 837	175 154	121 273	28 438	6 368	4	4
1781	Water well drilling	33	258	(D)	(D)	(D)	(D)	(D)	(D)	(D)	7	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	63	1 594	39 060	117 609	(D)	73 583	34 535	(D)	1 594	3	(D)
1793	Glass and glazing work	80	726	21 208	79 470	74 586	43 130	35 722	4 884	251	9	9
1794	Excavation work	268	1 383	37 590	136 842	116 606	79 856	39 947	20 235	4 749	7	6
1795	Wrecking and demolition work	19	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ..	69	2 301	72 438	192 216	(D)	146 065	40 966	(D)	1 837	2	(D)
1799	Special trade contractors, n.e.c.	450	4 930	115 069	309 844	283 527	204 195	86 428	26 317	10 592	4	4
	Vineland–Millville–Bridgeton, NJ PMSA											
15,16,17	Construction industries	311	1 891	52 851	224 524	178 191	115 784	65 657	46 332	(S)	4	3
	(See appropriate State for SIC detail.)											
	Wilmington–Newark, DE–MD PMSA											
15,16,17	Construction industries	1 464	13 797	365 890	1 459 648	1 108 951	696 784	439 709	350 697	23 149	1	1
	(See appropriate State for SIC detail.)											
	ALLENTOWN–BETHLEHEM–EASTON, PA MSA											
15,16,17	Construction industries	1 482	9 555	228 424	907 857	745 586	463 886	305 866	162 271	12 565	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	328	1 219	22 623	139 933	101 174	55 532	51 100	38 759	(S)	8	9
1522	Other residential buildings	(S)	43	745	3 654	3 167	1 767	1 400	487	*34	35	23
1531	Operative builders	35	226	5 303	42 560	26 490	12 555	(S)	16 070	198	18	12
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	15	(S)	3 308	(S)	(S)	6 258	(S)	(S)	*151	(S)	(S)
1542	Nonresidential buildings, n.e.c.	38	615	17 447	108 828	57 792	39 448	21 056	51 036	597	7	10
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	15	281	6 530	50 422	37 589	28 744	15 308	12 833	2 059	3	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	5	137	4 862	21 953	(D)	10 006	4 648	(D)	353	(Z)	(D)
1623	Water, sewer, and utility lines	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1629	Heavy construction, n.e.c.	(S)	268	8 896	25 125	22 828	16 044	8 925	2 297	935	16	15

PA—18 PENNSYLVANIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	ALLENTOWN-BETHLEHEM-EASTON, PA MSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	168	1 111	31 420	100 128	92 906	54 810	38 902	7 222	1 135	4	4
1721	Painting and paper hanging	94	502	11 136	28 120	27 375	19 961	7 568	*745	72	12	10
1731	Electrical work	105	920	25 347	74 225	72 821	44 658	29 723	1 404	497	6	5
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	94	511	10 702	29 305	28 341	20 400	8 008	964	842	17	12
1742	Plastering, drywall, and insulation work	37	674	20 156	55 151	50 367	30 911	19 478	4 784	162	3	3
1743	Terrazzo, tile, marble, and mosaic work	(S)	46	1 243	4 432	4 146	3 071	1 083	(S)	97	15	9
175	Carpentry and floor work:											
1751	Carpentry	156	565	9 283	41 369	36 083	18 732	18 020	5 286	*344	14	15
1752	Floor laying and other floor work	30	124	2 696	13 398	(D)	6 521	6 803	(D)	53	18	(D)
1761	Roofing, siding, and sheet metal work	71	390	7 603	27 419	25 838	12 938	13 022	1 581	232	12	10
1771	Concrete work	(S)	367	7 858	29 006	28 448	15 334	13 119	(S)	682	12	13
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	7	104	4 223	14 052	13 473	7 891	5 583	(S)	(D)	17	16
1793	Glass and glazing work	(S)	*16	253	(S)	(S)	545	(S)	—	—	48	(S)
1794	Excavation work	68	290	6 421	25 255	24 008	18 628	6 560	1 247	*1 272	17	19
1795	Wrecking and demolition work	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	6	230	4 842	10 837	(D)	8 233	2 419	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c.	59	564	8 191	25 326	24 164	17 372	8 121	1 162	683	8	9
	HARRISBURG-LEBANON-CARLISLE, PA MSA											
15,16,17	Construction industries	1 276	12 181	322 918	1 489 561	1 065 112	638 045	458 459	424 449	20 200	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	300	1 348	29 650	247 149	150 824	62 754	91 982	96 325	2 575	9	7
1522	Other residential buildings	8	54	1 125	10 469	(D)	2 867	*5 107	(D)	(D)	32	(D)
1531	Operative builders	34	245	7 420	64 729	41 847	14 116	29 539	22 882	1 327	15	22
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1542	Nonresidential buildings, n.e.c.	73	1 483	44 968	412 444	193 336	119 487	76 928	219 108	1 162	4	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	30	721	20 782	(S)	(S)	46 654	(S)	(S)	3 997	5	(S)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	13	232	7 705	21 819	20 680	13 600	7 148	1 139	306	11	7
1629	Heavy construction, n.e.c.	19	188	5 556	27 290	(D)	12 754	6 512	(D)	515	11	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	174	2 310	70 853	219 006	188 192	114 136	77 705	30 814	5 127	2	2
1721	Painting and paper hanging	57	322	6 744	15 872	15 144	12 020	3 335	727	323	16	14
1731	Electrical work	99	942	25 537	78 841	75 797	45 427	30 758	3 045	489	5	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	86	825	20 493	59 557	57 398	41 421	15 996	(S)	733	6	4
1742	Plastering, drywall, and insulation work	56	943	23 576	65 479	62 051	40 024	22 646	3 428	427	4	4
1743	Terrazzo, tile, marble, and mosaic work	(S)	45	(D)	(D)	(D)	(D)	(D)	(D)	(S)	11	(D)
175	Carpentry and floor work:											
1751	Carpentry	67	267	5 303	19 629	17 914	11 718	6 686	(S)	236	16	12
1752	Floor laying and other floor work	11	38	867	3 456	3 390	1 812	2 265	(S)	(D)	15	27
1761	Roofing, siding, and sheet metal work	68	557	11 583	38 929	36 527	23 716	13 461	2 402	344	11	8
1771	Concrete work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

PENNSYLVANIA PA—19

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	HARRISBURG—LEBANON—CARLISLE, PA MSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1781	Water well drilling -----	3	(D)	(D)	(D)	(D)	(D)	1 651	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	5	64	1 639	3 673	(D)	2 611	610	(D)	(D)	(Z)	(D)
1793	Glass and glazing work -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work -----	50	300	5 938	20 278	19 354	12 380	7 021	925	669	13	12
1795	Wrecking and demolition work -----	*3	*39	*664	*2 636	*2 441	*2 197	*244	*195	—	47	41
1796	Installing building equipment, n.e.c. -----	9	383	9 814	25 042	(D)	18 533	2 634	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c. -----	50	286	5 542	15 753	14 875	10 133	5 288	878	139	25	19
	PITTSBURGH, PA MSA											
15,16,17	Construction industries -----	5 518	54 910	1 458 387	6 331 124	4 682 231	3 014 743	1 804 254	1 648 893	79 794	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	1 118	4 185	71 249	425 160	309 217	149 766	164 028	115 943	3 946	6	6
1522	Other residential buildings -----	42	315	(S)	61 221	(S)	(S)	17 209	30 329	—	23	(S)
1531	Operative builders -----	122	792	17 039	191 278	136 769	81 132	63 866	54 509	614	12	13
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	37	411	(S)	48 121	(D)	21 745	13 424	(D)	(S)	14	(D)
1542	Nonresidential buildings, n.e.c. -----	276	6 015	196 635	1 518 799	651 492	387 995	296 396	867 307	10 495	4	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	115	3 069	95 178	425 845	329 249	194 344	149 731	96 596	12 885	5	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	23	1 553	35 434	158 328	126 410	78 155	49 023	31 918	2 733	9	8
1623	Water, sewer, and utility lines -----	106	1 990	58 736	215 274	187 463	118 370	70 864	27 811	8 299	5	5
1629	Heavy construction, n.e.c. -----	144	3 689	109 608	510 654	364 888	263 299	132 258	145 766	11 227	4	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning -----	773	8 705	254 473	851 393	733 774	499 124	240 575	117 619	6 995	2	1
1721	Painting and paper hanging -----	388	2 263	43 306	119 657	115 922	83 262	35 100	3 735	1 083	7	7
1731	Electrical work -----	426	5 134	161 827	478 966	462 937	291 150	174 008	16 028	3 668	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work -----	307	2 117	42 091	125 300	114 959	82 932	32 286	(S)	1 209	7	5
1742	Plastering, drywall, and insulation work -----	(S)	1 791	46 694	131 107	121 540	82 307	41 513	9 567	843	4	4
1743	Terrazzo, tile, marble, and mosaic work -----	25	231	6 510	17 702	17 299	11 835	6 826	(S)	*331	16	14
175	Carpentry and floor work:											
1751	Carpentry -----	302	1 406	25 096	91 314	83 971	53 788	30 862	7 343	1 206	10	11
1752	Floor laying and other floor work -----	(S)	523	10 520	43 646	41 723	24 658	18 500	(S)	350	10	10
1761	Roofing, siding, and sheet metal work -----	238	2 799	66 441	242 698	234 092	146 225	87 952	8 605	1 760	6	4
1771	Concrete work -----	272	1 407	26 597	104 854	97 449	59 304	38 436	7 405	1 347	9	8
1781	Water well drilling -----	12	68	(D)	6 534	(D)	(D)	(D)	(D)	(D)	4	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	21	411	11 750	33 579	(D)	23 906	5 698	(D)	(D)	10	(D)
1793	Glass and glazing work -----	40	231	5 288	23 303	22 720	13 767	10 659	*583	373	20	22
1794	Excavation work -----	173	877	19 655	69 857	65 448	45 040	21 619	4 410	4 693	11	8
1795	Wrecking and demolition work -----	(S)	42	(D)	(S)	(D)	(D)	(D)	(D)	7	(Z)	(D)
1796	Installing building equipment, n.e.c. -----	43	2 530	85 265	273 305	(D)	183 321	34 218	(D)	734	1	(D)
1799	Special trade contractors, n.e.c. -----	273	2 358	45 323	156 995	143 087	97 216	64 106	13 908	3 857	7	6

PA—20 PENNSYLVANIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SCRANTON-WILKES-BARRE—HAZLETON, PA MSA											
15,16,17	Construction industries	1 614	8 699	206 050	825 138	681 573	416 091	284 099	143 566	15 042	3	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	469	1 410	22 265	164 173	122 730	61 066	62 620	41 443	3 328	9	13
1522	Other residential buildings	*6	45	1 164	*4 263	*3 925	*2 401	*1 680	*338	—	36	44
1531	Operative builders	*23	105	2 439	14 058	13 150	(S)	5 656	908	(S)	27	17
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	26	589	22 349	65 533	49 055	32 268	16 797	16 478	356	16	25
1542	Nonresidential buildings, n.e.c.	49	515	12 767	78 625	44 142	30 193	14 825	34 482	582	10	17
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	26	605	16 463	62 996	51 666	30 178	25 745	11 330	3 296	5	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	20	398	11 470	33 731	29 608	22 114	7 501	4 122	316	16	15
1629	Heavy construction, n.e.c.	22	321	9 666	30 010	25 379	20 607	5 531	4 630	354	14	14
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	194	1 158	30 381	100 770	89 170	49 637	40 565	11 600	1 737	9	7
1721	Painting and paper hanging.....	63	202	4 454	14 022	13 859	10 963	(S)	*164	*251	19	18
1731	Electrical work	123	839	25 374	79 570	77 402	46 620	31 119	2 169	1 268	6	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work.....	(S)	322	5 362	16 380	15 509	9 778	5 739	(S)	446	17	16
1742	Plastering, drywall, and insulation work	40	201	4 210	15 518	13 553	9 611	4 731	1 965	(S)	13	16
1743	Terrazzo, tile, marble, and mosaic work	*18	33	799	2 974	(D)	1 591	1 377	(D)	(D)	25	(D)
175	Carpentry and floor work:											
1751	Carpentry	120	383	5 540	24 028	21 967	13 453	10 129	(S)	*1 308	27	29
1752	Floor laying and other floor work	(S)	(S)	316	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(S)
1761	Roofing, siding, and sheet metal work	70	373	6 578	27 205	24 592	11 698	13 100	(S)	(S)	20	20
1771	Concrete work	(S)	162	2 802	20 101	16 449	9 531	7 016	*3 652	*377	26	22
1781	Water well drilling	10	35	841	4 139	4 104	2 528	1 576	*35	214	16	17
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	(S)	(D)	(S)	2 421	(S)	(D)	(S)	(D)	(S)	(Z)
1793	Glass and glazing work	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work.....	(S)	187	3 939	12 587	(D)	8 540	5 162	(D)	(S)	21	(D)
1795	Wrecking and demolition work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1796	Installing building equipment, n.e.c.	(S)	174	1 835	5 360	(D)	3 992	1 271	(D)	(D)	4	(D)
1799	Special trade contractors, n.e.c.	94	317	4 902	17 520	16 803	11 426	6 741	717	(D)	15	15

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Appendix D. Metropolitan Areas

[Titles and definitions shown for MSA's, CMSA's, and PMSA's are those established by the Office of Management and Budget as of June 30, 1993]

Abilene, TX MSA

Taylor County, TX

Akron, OH PMSA—see Cleveland–Akron, OH CMSA

Albany, GA MSA

Dougherty County, GA
Lee County, GA

Albany–Schenectady–Troy, NY MSA

Albany County, NY
Montgomery County, NY
Rensselaer County, NY
Saratoga County, NY
Schenectady County, NY
Schoharie County, NY

Albuquerque, NM MSA

Bernalillo County, NM
Sandoval County, NM
Valencia County, NM

Alexandria, LA MSA

Rapides Parish, LA

Allentown–Bethlehem–Easton, PA MSA

Carbon County, PA
Lehigh County, PA
Northampton County, PA

Altoona, PA MSA

Blair County, PA

Amarillo, TX MSA

Potter County, TX
Randall County, TX

Anchorage, AK MSA

Anchorage Borough, AK

Ann Arbor, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Anniston, AL MSA

Calhoun County, AL

Appleton–Oshkosh–Neenah, WI MSA

Calumet County, WI
Outagamie County, WI
Winnebago County, WI

Asheville, NC MSA

Buncombe County, NC
Madison County, NC

Athens, GA MSA

Clarke County, GA
Madison County, GA
Oconee County, GA

Atlanta, GA MSA

Barrow County, GA
Bartow County, GA

Atlanta, GA MSA—Con.

Carroll County, GA
Cherokee County, GA
Clayton County, GA
Cobb County, GA
Coweta County, GA
DeKalb County, GA
Douglas County, GA
Fayette County, GA
Forsyth County, GA
Fulton County, GA
Gwinnett County, GA
Henry County, GA
Newton County, GA
Paulding County, GA
Pickens County, GA
Rockdale County, GA
Spalding County, GA
Walton County, GA

Atlantic–Cape May, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Augusta–Aiken, GA–SC MSA

Columbia County, GA
McDuffie County, GA
Richmond County, GA
Aiken County, SC
Edgefield County, SC

Austin–San Marcos, TX MSA

Bastrop County, TX
Caldwell County, TX
Hays County, TX
Travis County, TX
Williamson County, TX

Bakersfield, CA MSA

Kern County, CA

Baltimore, MD PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA

Bangor, ME MSA

Penobscot County, ME (part)
Bangor city, ME
Brewer city, ME
Eddington town, ME
Glenburn town, ME
Hampden town, ME
Hermon town, ME
Holden town, ME
Kenduskeag town, ME
Milford town, ME
Old Town city, ME
Orono town, ME
Orrington town, ME
Penobscot Indian Island Reservation, ME
Veazie town, ME

Bangor, ME MSA—Con.

Waldo County, ME (part)
Winterport town, ME

Barnstable–Yarmouth, MA MSA

Barnstable County, MA (part)
Barnstable city, MA
Brewster town, MA
Chatham town, MA
Dennis town, MA
Eastham town, MA
Harwich town, MA
Mashpee town, MA
Orleans town, MA
Sandwich town, MA
Yarmouth town, MA

Baton Rouge, LA MSA

Ascension Parish, LA
East Baton Rouge Parish, LA
Livingston Parish, LA
West Baton Rouge Parish, LA

Beaumont–Port Arthur, TX MSA

Hardin County, TX
Jefferson County, TX
Orange County, TX

Bellingham, WA MSA

Whatcom County, WA

Benton Harbor, MI MSA

Berrien County, MI

Bergen–Passaic, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Billings, MT MSA

Yellowstone County, MT

Biloxi–Gulfport–Pascagoula, MS MSA

Hancock County, MS
Harrison County, MS
Jackson County, MS

Binghamton, NY MSA

Broome County, NY
Tioga County, NY

Birmingham, AL MSA

Blount County, AL
Jefferson County, AL
St. Clair County, AL
Shelby County, AL

Bismarck, ND MSA

Burleigh County, ND
Morton County, ND

Bloomington, IN MSA

Monroe County, IN

Bloomington–Normal, IL MSA

McLean County, IL

Boise City, ID MSA

Ada County, ID

Canyon County, ID

**Boston, MA–NH PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA**

Boston, MA–NH PMSA

Bristol County, MA (part)

Berkley town, MA

Dighton town, MA

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Essex town, MA

Gloucester city, MA

Hamilton town, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Manchester town, MA

Marblehead town, MA

Middleton town, MA

Nahant town, MA

Newbury town, MA

Newburyport city, MA

Peabody city, MA

Rockport town, MA

Rowley town, MA

Salem city, MA

Salisbury town, MA

Saugus town, MA

Swampscott town, MA

Topsfield town, MA

Wenham town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Holliston town, MA

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Lincoln town, MA

Littleton town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Sherborn town, MA

Shirley town, MA

Somerville city, MA

Stoneham town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Middlesex County, MA (part)

Stow town, MA

Sudbury town, MA

Townsend town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

Winchester town, MA

Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Cohasset town, MA

Dedham town, MA

Dover town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Millis town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Plainville town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Norwell town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

Suffolk County, MA

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA

Blackstone town, MA

Bolton town, MA

Harvard town, MA

Hopedale town, MA

Lancaster town, MA

Mendon town, MA

Milford town, MA

Millville town, MA

Southborough town, MA

Upton town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Rockingham County, NH (part)

Seabrook town, NH

South Hampton town, NH

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Halifax town, MA

Hanson town, MA

Lakeville town, MA

Middleborough town, MA

Plympton town, MA

West Bridgewater town, MA

Whitman town, MA

Fitchburg–Leominster, MA PMSA

Middlesex County, MA (part)

Ashby town, MA

Worcester County, MA (part)

Ashburnham town, MA

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lunenburg town, MA

Templeton town, MA

Westminster town, MA

Winchendon town, MA

Lawrence, MA–NH PMSA

Essex County, MA (part)

Andover town, MA

Boxford town, MA

Georgetown town, MA

Groveland town, MA

Haverhill city, MA

Lawrence city, MA

Merrimac town, MA

Methuen city, MA

North Andover town, MA

West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH

Chester town, NH

Danville town, NH

Derry town, NH

Fremont town, NH

Hampstead town, NH

Kingston town, NH

Newton town, NH

Plaistow town, NH

Raymond town, NH

Salem town, NH

Sandown town, NH

Windham town, NH

Lowell, MA–NH PMSA

Middlesex County, MA (part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Dunstable town, MA

Groton town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Tyngsborough town, MA

Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Manchester, NH PMSA
 Hillsborough County, NH (part)
 Bedford town, NH
 Goffstown town, NH
 Manchester city, NH
 Weare town, NH
 Merrimack County, NH (part)
 Allentown town, NH
 Hooksett town, NH
 Rockingham County, NH (part)
 Auburn town, NH
 Candia town, NH
 Londonderry town, NH
 Nashua, NH PMSA
 Hillsborough County, NH (part)
 Amherst town, NH
 Brookline town, NH
 Greenville town, NH
 Hollis town, NH
 Hudson town, NH
 Litchfield town, NH
 Mason town, NH
 Merrimack town, NH
 Milford town, NH
 Mont Vernon town, NH
 Nashua city, NH
 New Ipswich town, NH
 Wilton town, NH
 New Bedford, MA PMSA
 Bristol County, MA (part)
 Acushnet town, MA
 Dartmouth town, MA
 Fairhaven town, MA
 Freetown town, MA
 New Bedford city, MA
 Plymouth County, MA (part)
 Marion town, MA
 Mattapoisett town, MA
 Rochester town, MA
 Portsmouth–Rochester, NH–ME PMSA
 York County, ME (part)
 Berwick town, ME
 Eliot town, ME
 Kittery town, ME
 South Berwick town, ME
 York town, ME
 Rockingham County, NH (part)
 Brentwood town, NH
 East Kingston town, NH
 Epping town, NH
 Exeter town, NH
 Greenland town, NH
 Hampton town, NH
 Hampton Falls town, NH
 Kensington town, NH
 New Castle town, NH
 Newfields town, NH
 Newington town, NH
 Newmarket town, NH
 North Hampton town, NH
 Portsmouth city, NH
 Rye town, NH
 Stratham town, NH
 Strafford County, NH (part)
 Barrington town, NH
 Dover city, NH
 Durham town, NH
 Farmington town, NH
 Lee town, NH
 Madbury town, NH
 Milton town, NH
 Rochester city, NH
 Rollinsford town, NH
 Somersworth city, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Worcester, MA–CT PMSA
 Windham County, CT (part)
 Thompson town, CT
 Hampden County, MA (part)
 Holland town, MA
 Worcester County, MA (part)
 Auburn town, MA
 Barre town, MA
 Boylston town, MA
 Brookfield town, MA
 Charlton town, MA
 Clinton town, MA
 Douglas town, MA
 Dudley town, MA
 East Brookfield town, MA
 Grafton town, MA
 Holden town, MA
 Leicester town, MA
 Millbury town, MA
 Northborough town, MA
 Northbridge town, MA
 North Brookfield town, MA
 Oakham town, MA
 Oxford town, MA
 Paxton town, MA
 Princeton town, MA
 Rutland town, MA
 Shrewsbury town, MA
 Southbridge town, MA
 Spencer town, MA
 Sterling town, MA
 Sturbridge town, MA
 Sutton town, MA
 Uxbridge town, MA
 Webster town, MA
 Westborough town, MA
 West Boylston town, MA
 West Brookfield town, MA
 Worcester city, MA

**Boulder–Longmont, CO PMSA—see
Denver–Boulder–Greeley, CO CMSA****Brazoria, TX PMSA—see Houston–
Galveston–Brazoria, TX CMSA****Bremerton, WA PMSA—see Seattle–
Tacoma–Bremerton, WA CMSA****Bridgeport, CT PMSA—see New York–
Northern New Jersey–Long Island, NY–
NJ–CT–PA CMSA****Brockton, MA PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Brownsville–Harlingen–San Benito, TX MSA**
Cameron County, TX**Bryan–College Station, TX MSA**
Brazos County, TX**Buffalo–Niagara Falls, NY MSA**
Erie County, NY
Niagara County, NY

Burlington, VT MSA
 Chittenden County, VT (part)
 Burlington city, VT
 Charlotte town, VT
 Colchester town, VT
 Essex Junction village, VT
 Essex town balance, VT
 Hinesburg town, VT
 Jericho town, VT
 Jericho village, VT
 Milton town, VT
 Milton village, VT
 Richmond town, VT
 St. George town, VT
 Shelburne town, VT

Burlington, VT MSA—Con.
 Chittenden County, VT (part)—Con.
 South Burlington city, VT
 Williston town, VT
 Winooski city, VT
 Franklin County, VT (part)
 Fairfax town, VT
 Georgia town, VT
 St. Albans city, VT
 St. Albans town, VT
 Swanton town, VT
 Swanton village, VT
 Grand Isle County, VT (part)
 Grand Isle town, VT
 South Hero town, VT

Canton–Massillon, OH MSA
Carroll County, OH
Stark County, OH**Casper, WY MSA**
Natrona County, WY**Cedar Rapids, IA MSA**
Linn County, IA**Champaign–Urbana, IL MSA**
Champaign County, IL**Charleston–North Charleston, SC MSA**
Berkeley County, SC
Charleston County, SC
Dorchester County, SC**Charleston, WV MSA**
Kanawha County, WV
Putnam County, WV**Charlotte–Gastonia–Rock Hill, NC–SC MSA**
Cabarrus County, NC
Gaston County, NC
Lincoln County, NC
Mecklenburg County, NC
Rowan County, NC
Union County, NC
York County, SC**Charlottesville, VA MSA**
Albemarle County, VA
Fluvanna County, VA
Greene County, VA
Charlottesville city, VA**Chattanooga, TN–GA MSA**
Catoosa County, GA
Dade County, GA
Walker County, GA
Hamilton County, TN
Marion County, TN**Cheyenne, WY MSA**
Laramie County, WY**Chicago, IL PMSA—see Chicago–Gary–
Kenosha, IL–IN–WI CMSA**

Chicago–Gary–Kenosha, IL–IN–WI CMSA
 Chicago, IL PMSA
 Cook County, IL
 DeKalb County, IL
 DuPage County, IL
 Grundy County, IL
 Kane County, IL
 Kendall County, IL
 Lake County, IL
 McHenry County, IL
 Will County, IL
 Gary, IN PMSA
 Lake County, IN
 Porter County, IN
 Kankakee, IL PMSA
 Kankakee County, IL

Chicago–Gary–Kenosha, IL–IN–WI CMSA—Con.

Kenosha, WI PMSA
Kenosha County, WI

Chico–Paradise, CA MSA

Butte County, CA

Cincinnati, OH–KY–IN PMSA—see**Cincinnati–Hamilton, OH–KY–IN CMSA****Cincinnati–Hamilton, OH–KY–IN CMSA**

Cincinnati, OH–KY–IN PMSA
Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH
Hamilton–Middletown, OH PMSA
Butler County, OH

Clarksville–Hopkinsville, TN–KY MSA

Christian County, KY
Montgomery County, TN

Cleveland–Lorain–Elyria, OH PMSA—see**Cleveland–Akron, OH CMSA****Cleveland–Akron, OH CMSA**

Akron, OH PMSA
Portage County, OH
Summit County, OH
Cleveland–Lorain–Elyria, OH PMSA
Ashtabula County, OH
Cuyahoga County, OH
Geauga County, OH
Lake County, OH
Lorain County, OH
Medina County, OH

Colorado Springs, CO MSA

El Paso County, CO

Columbia, MO MSA

Boone County, MO

Columbia, SC MSA

Lexington County, SC
Richland County, SC

Columbus, GA–AL MSA

Russell County, AL
Chattahoochee County, GA
Harris County, GA
Muscooke County, GA

Columbus, OH MSA

Delaware County, OH
Fairfield County, OH
Franklin County, OH
Licking County, OH
Madison County, OH
Pickaway County, OH

Corpus Christi, TX MSA

Nueces County, TX
San Patricio County, TX

Cumberland, MD–WV MSA

Allegany County, MD
Mineral County, WV

Dallas, TX PMSA—see Dallas–Fort Worth, TX CMSA**Dallas–Fort Worth, TX CMSA**

Dallas, TX PMSA
Collin County, TX
Dallas County, TX
Denton County, TX
Ellis County, TX
Henderson County, TX
Hunt County, TX
Kaufman County, TX
Rockwall County, TX
Fort Worth–Arlington, TX PMSA
Hood County, TX
Johnson County, TX
Parker County, TX
Tarrant County, TX

Danbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Danville, VA MSA**

Pittsylvania County, VA
Danville city, VA

Davenport–Moline–Rock Island, IA–IL MSA

Henry County, IL
Rock Island County, IL
Scott County, IA

Dayton–Springfield, OH MSA

Clark County, OH
Greene County, OH
Miami County, OH
Montgomery County, OH

Daytona Beach, FL MSA

Flagler County, FL
Volusia County, FL

Decatur, AL MSA

Lawrence County, AL
Morgan County, AL

Decatur, IL MSA

Macon County, IL

Denver, CO PMSA—see Denver–Boulder–Greeley, CO CMSA**Denver–Boulder–Greeley, CO CMSA**

Boulder–Longmont, CO PMSA
Boulder County, CO
Denver, CO PMSA
Adams County, CO
Arapahoe County, CO
Denver County, CO
Douglas County, CO
Jefferson County, CO
Greeley, CO PMSA
Weld County, CO

Des Moines, IA MSA

Dallas County, IA
Polk County, IA
Warren County, IA

Detroit, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA**Detroit–Ann Arbor–Flint, MI CMSA**

Ann Arbor, MI PMSA
Lenawee County, MI
Livingston County, MI
Washtenaw County, MI
Detroit, MI PMSA
Lapeer County, MI
Macomb County, MI
Monroe County, MI
Oakland County, MI
St. Clair County, MI
Wayne County, MI

Detroit–Ann Arbor–Flint, MI CMSA—Con.

Flint, MI PMSA
Genesee County, MI

Dothan, AL MSA

Dale County, AL
Houston County, AL

Dover, DE MSA

Kent County, DE

Dubuque, IA MSA

Dubuque County, IA

Duluth–Superior, MN–WI MSA

St. Louis County, MN
Douglas County, WI

Dutchess County, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Eau Claire, WI MSA**

Chippewa County, WI
Eau Claire County, WI

El Paso, TX MSA

El Paso County, TX

Elkhart–Goshen, IN MSA

Elkhart County, IN

Elmira, NY MSA

Chemung County, NY

Enid, OK MSA

Garfield County, OK

Erie, PA MSA

Erie County, PA

Eugene–Springfield, OR MSA

Lane County, OR

Evansville–Henderson, IN–KY MSA

Posey County, IN
Vanderburgh County, IN
Warrick County, IN
Henderson County, KY

Fargo–Moorhead, ND–MN MSA

Clay County, MN
Cass County, ND

Fayetteville, NC MSA

Cumberland County, NC

Fayetteville–Springdale–Rogers, AR MSA

Benton County, AR
Washington County, AR

Fitchburg–Leominster, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Flint, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA****Florence, AL MSA**

Colbert County, AL
Lauderdale County, AL

Florence, SC MSA

Florence County, SC

Fort Collins–Loveland, CO MSA

Larimer County, CO

Fort Lauderdale, FL PMSA—see Miami–Fort Lauderdale, FL CMSA**Fort Myers–Cape Coral, FL MSA**

Lee County, FL

Fort Pierce–Port St. Lucie, FL MSA

Martin County, FL
St. Lucie County, FL

Fort Smith, AR—OK MSA
Crawford County, AR
Sebastian County, AR
Sequoyah County, OK

Fort Walton Beach, FL MSA
Okaloosa County, FL

Fort Wayne, IN MSA
Adams County, IN
Allen County, IN
De Kalb County, IN
Huntington County, IN
Wells County, IN
Whitley County, IN

**Fort Worth—Arlington, TX PMSA—see
Dallas—Fort Worth, TX CMSA**

Fresno, CA MSA
Fresno County, CA
Madera County, CA

Gadsden, AL MSA
Etowah County, AL

Gainesville, FL MSA
Alachua County, FL

**Galveston—Texas City, TX PMSA—see
Houston—Galveston—Brazoria, TX CMSA**

**Gary, IN PMSA—see Chicago—Gary—
Kenosha, IL—IN—WI CMSA**

Glens Falls, NY MSA
Warren County, NY
Washington County, NY

Goldsboro, NC MSA
Wayne County, NC

Grand Forks, ND—MN MSA
Polk County, MN
Grand Forks County, ND

Grand Rapids—Muskegon—Holland, MI MSA
Allegan County, MI
Kent County, MI
Muskegon County, MI
Ottawa County, MI

Great Falls, MT MSA
Cascade County, MT

**Greeley, CO PMSA—see Denver—Boulder—
Greeley, CO CMSA**

Green Bay, WI MSA
Brown County, WI

**Greensboro—Winston-Salem—High Point, NC
MSA**
Alamance County, NC
Davidson County, NC
Davie County, NC
Forsyth County, NC
Guilford County, NC
Randolph County, NC
Stokes County, NC
Yadkin County, NC

Greenville, NC MSA
Pitt County, NC

Greenville—Spartanburg—Anderson, SC MSA
Anderson County, SC
Cherokee County, SC
Greenville County, SC
Pickens County, SC
Spartanburg County, SC

**Hagerstown, MD PMSA—see Washington—
Baltimore, DC—MD—VA—WV CMSA**

**Hamilton—Middletown, OH PMSA—see
Cincinnati—Hamilton, OH—KY—IN CMSA**

Harrisburg—Lebanon—Carlisle, PA MSA
Cumberland County, PA
Dauphin County, PA
Lebanon County, PA
Perry County, PA

Hartford, CT MSA
Hartford County, CT (part)
Avon town, CT
Berlin town, CT
Bloomfield town, CT
Bristol city, CT
Burlington town, CT
Canton town, CT
East Granby town, CT
East Hartford town, CT
East Windsor town, CT
Enfield town, CT
Farmington town, CT
Glastonbury town, CT
Granby town, CT
Hartford city, CT
Manchester town, CT
Marlborough town, CT
New Britain city, CT
Newington town, CT
Plainville town, CT
Rocky Hill town, CT
Simsbury town, CT
Southington town, CT
South Windsor town, CT
Suffield town, CT
West Hartford town, CT
Wethersfield town, CT
Windsor town, CT
Windsor Locks town, CT

Litchfield County, CT (part)
Barkhamsted town, CT
Harwinton town, CT
New Hartford town, CT
Plymouth town, CT
Winchester town, CT

Middlesex County, CT (part)
Cromwell town, CT
Durham town, CT
East Haddam town, CT
East Hampton town, CT
Haddam town, CT
Middlefield town, CT
Middletown city, CT
Portland town, CT

New London County, CT (part)
Colchester town, CT
Lebanon town, CT

Tolland County, CT (part)
Andover town, CT
Bolton town, CT
Columbia town, CT
Coventry town, CT
Ellington town, CT
Hebron town, CT
Mansfield town, CT
Somers town, CT
Stafford town, CT
Tolland town, CT
Vernon town, CT
Willington town, CT

Windham County, CT (part)
Ashford town, CT
Chaplin town, CT
Windham town, CT

Hickory—Morganton, NC MSA
Alexander County, NC
Burke County, NC
Caldwell County, NC
Catawba County, NC

Honolulu, HI MSA
Honolulu County, HI

Houma, LA MSA
Lafourche Parish, LA
Terrebonne Parish, LA

**Houston, TX PMSA—see Houston—Galveston—
Brazoria, TX CMSA**

Houston—Galveston—Brazoria, TX CMSA
Brazoria, TX PMSA
Brazoria County, TX
Galveston—Texas City, TX PMSA
Galveston County, TX
Houston, TX PMSA
Chambers County, TX
Fort Bend County, TX
Harris County, TX
Liberty County, TX
Montgomery County, TX
Waller County, TX

Huntington—Ashland, WV—KY—OH MSA
Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Huntsville, AL MSA
Limestone County, AL
Madison County, AL

Indianapolis, IN MSA
Boone County, IN
Hamilton County, IN
Hancock County, IN
Hendricks County, IN
Johnson County, IN
Madison County, IN
Marion County, IN
Morgan County, IN
Shelby County, IN

Iowa City, IA MSA
Johnson County, IA

Jackson, MI MSA
Jackson County, MI

Jackson, MS MSA
Hinds County, MS
Madison County, MS
Rankin County, MS

Jackson, TN MSA
Madison County, TN

Jacksonville, FL MSA
Clay County, FL
Duval County, FL
Nassau County, FL
St. Johns County, FL

Jacksonville, NC MSA
Onslow County, NC

Jamestown, NY MSA
Chautauqua County, NY

Janesville—Beloit, WI MSA
Rock County, WI

Jersey City, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Johnson City—Kingsport—Bristol, TN—VA MSA

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol city, VA

Johnstown, PA MSA

Cambria County, PA
Somerset County, PA

Joplin, MO MSA

Jasper County, MO
Newton County, MO

Kalamazoo—Battle Creek, MI MSA

Calhoun County, MI
Kalamazoo County, MI
Van Buren County, MI

Kankakee, IL PMSA—see Chicago—Gary—Kenosha, IL—IN—WI CMSA

Kansas City, MO—KS MSA

Johnson County, KS
Leavenworth County, KS
Miami County, KS
Wyandotte County, KS
Cass County, MO
Clay County, MO
Clinton County, MO
Jackson County, MO
Lafayette County, MO
Platte County, MO
Ray County, MO

Kenosha, WI PMSA—see Chicago—Gary—Kenosha, IL—IN—WI CMSA

Killeen—Temple, TX MSA

Bell County, TX
Coryell County, TX

Knoxville, TN MSA

Anderson County, TN
Blount County, TN
Knox County, TN
Loudon County, TN
Sevier County, TN
Union County, TN

Kokomo, IN MSA

Howard County, IN
Tipton County, IN

La Crosse, WI—MN MSA

Houston County, MN
La Crosse County, WI

Lafayette, LA MSA

Acadia Parish, LA
Lafayette Parish, LA
St. Landry Parish, LA
St. Martin Parish, LA

Lafayette, IN MSA

Clinton County, IN
Tippecanoe County, IN

Lake Charles, LA MSA

Calcasieu Parish, LA

Lakeland—Winter Haven, FL MSA

Polk County, FL

Lancaster, PA MSA

Lancaster County, PA

Lansing—East Lansing, MI MSA

Clinton County, MI
Eaton County, MI
Ingham County, MI

Laredo, TX MSA

Webb County, TX

Las Cruces, NM MSA

Dona Ana County, NM

Las Vegas, NV—AZ MSA

Mohave County, AZ
Clark County, NV
Nye County, NV

Lawrence, KS MSA

Douglas County, KS

Lawrence, MA—NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Lawton, OK MSA

Comanche County, OK

Lewiston—Auburn, ME MSA

Androscoggin County, ME (part)
Auburn city, ME
Greene town, ME
Lewiston city, ME
Lisbon town, ME
Mechanic Falls town, ME
Poland town, ME
Sabattus town, ME
Turner town, ME
Wales town, ME

Lexington, KY MSA

Bourbon County, KY
Clark County, KY
Fayette County, KY
Jessamine County, KY
Madison County, KY
Scott County, KY
Woodford County, KY

Lima, OH MSA

Allen County, OH
Auglaize County, OH

Lincoln, NE MSA

Lancaster County, NE

Little Rock—North Little Rock, AR MSA

Faulkner County, AR
Lonoke County, AR
Pulaski County, AR
Saline County, AR

Longview—Marshall, TX MSA

Gregg County, TX
Harrison County, TX
Upshur County, TX

Los Angeles—Riverside—Orange County, CA CMSA

Los Angeles—Long Beach, CA PMSA
Los Angeles County, CA
Orange County, CA PMSA
Orange County, CA
Riverside—San Bernardino, CA PMSA
Riverside County, CA
San Bernardino County, CA
Ventura, CA PMSA
Ventura County, CA

Los Angeles—Long Beach, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Louisville, KY—IN MSA

Clark County, IN
Floyd County, IN
Harrison County, IN
Scott County, IN
Bullitt County, KY
Jefferson County, KY
Oldham County, KY

Lowell, MA—NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Lubbock, TX MSA

Lubbock County, TX

Lynchburg, VA MSA

Amherst County, VA
Bedford County, VA
Campbell County, VA
Bedford city, VA
Lynchburg city, VA

Macon, GA MSA

Bibb County, GA
Houston County, GA
Jones County, GA
Peach County, GA
Twiggs County, GA

Madison, WI MSA

Dane County, WI

Manchester, NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Mansfield, OH MSA

Crawford County, OH
Richland County, OH

McAllen—Edinburg—Mission, TX MSA

Hidalgo County, TX

Medford—Ashland, OR MSA

Jackson County, OR

Melbourne—Titusville—Palm Bay, FL MSA

Brevard County, FL

Memphis, TN—AR—MS MSA

Crittenden County, AR
DeSoto County, MS
Fayette County, TN
Shelby County, TN
Tipton County, TN

Merced, CA MSA

Merced County, CA

Miami—Fort Lauderdale, FL CMSA

Fort Lauderdale, FL PMSA
Broward County, FL
Miami, FL PMSA
Dade County, FL

Miami, FL PMSA—see Miami—Fort Lauderdale, FL CMSA

Middlesex—Somerset—Hunterdon, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Milwaukee—Waukesha, WI PMSA—see Milwaukee—Racine, WI CMSA

Milwaukee—Racine, WI CMSA

Milwaukee—Waukesha, WI PMSA
Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI

Milwaukee–Racine, WI CMSA—Con.

Racine, WI PMSA
Racine County, WI

Minneapolis–St. Paul, MN–WI MSA

Anoka County, MN
Carver County, MN
Chisago County, MN
Dakota County, MN
Hennepin County, MN
Isanti County, MN
Ramsey County, MN
Scott County, MN
Sherburne County, MN
Washington County, MN
Wright County, MN
Pierce County, WI
St. Croix County, WI

Mobile, AL MSA

Baldwin County, AL
Mobile County, AL

Modesto, CA MSA

Stanislaus County, CA

Monmouth–Ocean, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Monroe, LA MSA**

Ouachita Parish, LA

Montgomery, AL MSA

Autauga County, AL
Elmore County, AL
Montgomery County, AL

Muncie, IN MSA

Delaware County, IN

Myrtle Beach, SC MSA

Horry County, SC

Naples, FL MSA

Collier County, FL

Nashua, NH PMSA—see Boston–**Worcester–Lawrence, MA–NH–ME–CT CMSA****Nashville, TN MSA**

Cheatham County, TN
Davidson County, TN
Dickson County, TN
Robertson County, TN
Rutherford County, TN
Sumner County, TN
Williamson County, TN
Wilson County, TN

Nassau–Suffolk, NY PMSA—see New**York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New Bedford, MA PMSA—see Boston–****Worcester–Lawrence, MA–NH–ME–CT CMSA****New Haven–Meriden, CT PMSA—see New****York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New London–Norwich, CT–RI MSA**

Middlesex County, CT (part)
Fenwick borough, CT
Old Saybrook town, CT
New London County, CT (part)
Bozrah town, CT
East Lyme town, CT
Franklin town, CT
Griswold town balance, CT
Groton city, CT
Groton town balance, CT

New London–Norwich, CT–RI MSA—Con.

New London County, CT (part)—Con.
Groton Long Point borough, CT
Jewett City borough, CT
Ledyard town, CT
Lisbon town, CT
Montville town, CT
New London city, CT
North Stonington town, CT
Norwich city, CT
Old Lyme town, CT
Preston town, CT
Salem town, CT
Sprague town, CT
Stonington borough, CT
Stonington town, CT
Waterford town, CT
Windham County, CT (part)
Canterbury town, CT
Plainfield town, CT
Washington County, RI (part)
Hopkinton town, RI
Westerly town, RI

New Orleans, LA MSA

Jefferson Parish, LA
Orleans Parish, LA
Plaquemines Parish, LA
St. Bernard Parish, LA
St. Charles Parish, LA
St. James Parish, LA
St. John the Baptist Parish, LA
St. Tammany Parish, LA

New York, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**

Bergen–Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (part)
Bridgeport city, CT
Easton town, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (part)
Ansonia city, CT
Beacon Falls town, CT
Derby city, CT
Milford city (balance), CT
Oxford town, CT
Seymour town, CT
Woodmont borough, CT
Danbury, CT PMSA
Fairfield County, CT (part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown borough, CT
Newtown town, CT
Redding town, CT
Ridgefield town, CT
Sherman town, CT
Litchfield County, CT (part)
Bridgewater town, CT
New Milford town, CT
Roxbury town, CT
Washington town, CT
Dutchess County, NY PMSA
Dutchess County, NY

New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA—Con.

Jersey City, NJ PMSA
Hudson County, NJ
Middlesex–Somerset–Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth–Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau–Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY
New Haven–Meriden, CT PMSA
Middlesex County, CT (part)
Clinton town, CT
Killingworth town, CT
New Haven County, CT (part)
Bethany town, CT
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT
Woodbridge town, CT
New York, NY PMSA
Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY
Queens County, NY
Richmond County, NY
Rockland County, NY
Westchester County, NY
Newark, NJ PMSA
Essex County, NJ
Morris County, NJ
Sussex County, NJ
Union County, NJ
Warren County, NJ
Newburgh, NY–PA PMSA
Orange County, NY
Pike County, PA
Stamford–Norwalk, CT PMSA
Fairfield County, CT (part)
Darien town, CT
Greenwich town, CT
New Canaan town, CT
Norwalk city, CT
Stamford city, CT
Weston town, CT
Westport town, CT
Wilton town, CT
Trenton, NJ PMSA
Mercer County, NJ
Waterbury, CT PMSA
Litchfield County, CT (part)
Bethlehem town, CT
Thomaston town, CT
Watertown town, CT
Woodbury town, CT
New Haven County, CT (part)
Middlebury town, CT
Naugatuck borough, CT
Prospect town, CT
Southbury town, CT
Waterbury city, CT
Wolcott town, CT

Newark, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Newburgh, NY–PA PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Norfolk–Virginia Beach–Newport News, VA–NC MSA

Currituck County, NC
Gloucester County, VA
Isle of Wight County, VA
James City County, VA
Mathews County, VA
York County, VA
Chesapeake city, VA
Hampton city, VA
Newport News city, VA
Norfolk city, VA
Poquoson city, VA
Portsmouth city, VA
Suffolk city, VA
Virginia Beach city, VA
Williamsburg city, VA

Oakland, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Ocala, FL MSA

Marion County, FL

Odessa–Midland, TX MSA

Ector County, TX
Midland County, TX

Oklahoma City, OK MSA

Canadian County, OK
Cleveland County, OK
Logan County, OK
McClain County, OK
Oklahoma County, OK
Pottawatomie County, OK

Olympia, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Omaha, NE–IA MSA

Pottawattamie County, IA
Cass County, NE
Douglas County, NE
Sarpy County, NE
Washington County, NE

Orange County, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Orlando, FL MSA

Lake County, FL
Orange County, FL
Osceola County, FL
Seminole County, FL

Owensboro, KY MSA

Daviess County, KY

Panama City, FL MSA

Bay County, FL

Parkersburg–Marietta, WV–OH MSA

Washington County, OH
Wood County, WV

Pensacola, FL MSA

Escambia County, FL
Santa Rosa County, FL

Peoria–Pekin, IL MSA

Peoria County, IL
Tazewell County, IL
Woodford County, IL

Philadelphia, PA–NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Atlantic–Cape May, NJ PMSA
Atlantic County, NJ
Cape May County, NJ

Philadelphia, PA–NJ PMSA

Burlington County, NJ
Camden County, NJ
Gloucester County, NJ
Salem County, NJ
Bucks County, PA
Chester County, PA
Delaware County, PA
Montgomery County, PA

Philadelphia County, PA
Vineland–Millville–Bridgeton, NJ PMSA
Cumberland County, NJ

Wilmington–Newark, DE–MD PMSA
New Castle County, DE
Cecil County, MD

Phoenix–Mesa, AZ MSA

Maricopa County, AZ
Pinal County, AZ

Pine Bluff, AR MSA

Jefferson County, AR

Pittsburgh, PA MSA

Allegheny County, PA
Beaver County, PA
Butler County, PA
Fayette County, PA
Washington County, PA
Westmoreland County, PA

Pittsfield, MA MSA

Berkshire County, MA (part)
Adams town, MA
Cheshire town, MA
Dalton town, MA
Hinsdale town, MA
Lanesborough town, MA
Lee town, MA
Lenox town, MA
Pittsfield city, MA
Richmond town, MA
Stockbridge town, MA

Portland, ME MSA

Cumberland County, ME (part)
Cape Elizabeth town, ME
Casco town, ME
Cumberland town, ME
Falmouth town, ME
Freeport town, ME
Gorham town, ME
Gray town, ME
North Yarmouth town, ME
Portland city, ME
Raymond town, ME
Scarborough town, ME
South Portland city, ME
Standish town, ME
Westbrook city, ME
Windham town, ME
Yarmouth town, ME
York County, ME (part)
Buxton town, ME
Hollis town, ME
Limington town, ME
Old Orchard Beach town, ME

Portland–Vancouver, OR–WA PMSA—see Portland–Salem, OR–WA CMSA

Portland–Salem, OR–WA CMSA

Portland–Vancouver, OR–WA PMSA

Clackamas County, OR
Columbia County, OR
Multnomah County, OR
Washington County, OR
Yamhill County, OR
Clark County, WA

Salem, OR PMSA

Marion County, OR
Polk County, OR

Portsmouth–Rochester, NH–ME PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Providence–Fall River–Warwick, RI–MA MSA

Bristol County, MA (part)
Attleboro city, MA
Fall River city, MA
North Attleborough town, MA
Rehoboth town, MA
Seekonk town, MA
Somerset town, MA
Swansea town, MA
Westport town, MA
Bristol County, RI
Barrington town, RI
Bristol town, RI
Warren town, RI
Kent County, RI
Coventry town, RI
East Greenwich town, RI
Warwick city, RI
West Greenwich town, RI
West Warwick town, RI
Newport County, RI (part)
Jamestown town, RI
Little Compton town, RI
Tiverton town, RI
Providence County, RI
Burrillville town, RI
Central Falls city, RI
Cranston city, RI
Cumberland town, RI
East Providence city, RI
Foster town, RI
Glocester town, RI
Johnston town, RI
Lincoln town, RI
North Providence town, RI
North Smithfield town, RI
Pawtucket city, RI
Providence city, RI
Scituate town, RI
Smithfield town, RI
Woonsocket city, RI
Washington County, RI (part)
Charlestown town, RI
Exeter town, RI
Narragansett town, RI
North Kingstown town, RI
Richmond town, RI
South Kingstown town, RI

Provo–Orem, UT MSA

Utah County, UT

Pueblo, CO MSA

Pueblo County, CO

Punta Gorda, FL MSA

Charlotte County, FL

Racine, WI PMSA—see Milwaukee—Racine, WI CMSA

Raleigh—Durham—Chapel Hill, NC MSA

Chatham County, NC
Durham County, NC
Franklin County, NC
Johnston County, NC
Orange County, NC
Wake County, NC

Rapid City, SD MSA

Pennington County, SD

Reading, PA MSA

Berks County, PA

Redding, CA MSA

Shasta County, CA

Reno, NV MSA

Washoe County, NV

Richland—Kennewick—Pasco, WA MSA

Benton County, WA
Franklin County, WA

Richmond—Petersburg, VA MSA

Charles City County, VA
Chesterfield County, VA
Dinwiddie County, VA
Goochland County, VA
Hanover County, VA
Henrico County, VA
New Kent County, VA
Powhatan County, VA
Prince George County, VA
Colonial Heights city, VA
Hopewell city, VA
Petersburg city, VA
Richmond city, VA

Riverside—San Bernardino, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Roanoke, VA MSA

Botetourt County, VA
Roanoke County, VA
Roanoke city, VA
Salem city, VA

Rochester, MN MSA

Olmsted County, MN

Rochester, NY MSA

Genesee County, NY
Livingston County, NY
Monroe County, NY
Ontario County, NY
Orleans County, NY
Wayne County, NY

Rockford, IL MSA

Boone County, IL
Ogle County, IL
Winnebago County, IL

Rocky Mount, NC MSA

Edgecombe County, NC
Nash County, NC

Sacramento, CA PMSA—see Sacramento—Yolo, CA CMSA

Sacramento—Yolo, CA CMSA

Sacramento, CA PMSA
El Dorado County, CA
Placer County, CA
Sacramento County, CA
Yolo, CA PMSA
Yolo County, CA

Saginaw—Bay City—Midland, MI MSA

Bay County, MI
Midland County, MI
Saginaw County, MI

St. Cloud, MN MSA

Benton County, MN
Stearns County, MN

St. Joseph, MO MSA

Andrew County, MO
Buchanan County, MO

St. Louis, MO—IL MSA

Clinton County, IL
Jersey County, IL
Madison County, IL
Monroe County, IL
St. Clair County, IL
Franklin County, MO
Jefferson County, MO
Lincoln County, MO
St. Charles County, MO
St. Louis County, MO
Warren County, MO
St. Louis city, MO

Salem, OR PMSA—see Portland—Salem, OR—WA CMSA

Salinas, CA MSA

Monterey County, CA

Salt Lake City—Ogden, UT MSA

Davis County, UT
Salt Lake County, UT
Weber County, UT

San Angelo, TX MSA

Tom Green County, TX

San Antonio, TX MSA

Bexar County, TX
Comal County, TX
Guadalupe County, TX
Wilson County, TX

San Diego, CA MSA

San Diego County, CA

San Francisco, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

San Francisco—Oakland—San Jose, CA CMSA

Oakland, CA PMSA
Alameda County, CA
Contra Costa County, CA
San Francisco, CA PMSA
Marin County, CA
San Francisco County, CA
San Mateo County, CA
San Jose, CA PMSA
Santa Clara County, CA
Santa Cruz—Watsonville, CA PMSA
Santa Cruz County, CA
Santa Rosa, CA PMSA
Sonoma County, CA
Vallejo—Fairfield—Napa, CA PMSA
Napa County, CA
Solano County, CA

San Jose, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

San Luis Obispo—Atascadero—Paso Robles, CA MSA

San Luis Obispo County, CA

Santa Barbara—Santa Maria—Lompoc, CA MSA

Santa Barbara County, CA

Santa Cruz—Watsonville, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Santa Fe, NM MSA

Los Alamos County, NM
Santa Fe County, NM

Santa Rosa, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Sarasota—Bradenton, FL MSA

Manatee County, FL
Sarasota County, FL

Savannah, GA MSA

Bryan County, GA
Chatham County, GA
Effingham County, GA

Scranton—Wilkes-Barre—Hazleton, PA MSA

Columbia County, PA
Lackawanna County, PA
Luzerne County, PA
Wyoming County, PA

Seattle—Bellevue—Everett, WA PMSA—see Seattle—Tacoma—Bremerton, WA CMSA

Seattle—Tacoma—Bremerton, WA CMSA

Bremerton, WA PMSA
Kitsap County, WA
Olympia, WA PMSA
Thurston County, WA
Seattle—Bellevue—Everett, WA PMSA
Island County, WA
King County, WA
Snohomish County, WA
Tacoma, WA PMSA
Pierce County, WA

Sharon, PA MSA

Mercer County, PA

Sheboygan, WI MSA

Sheboygan County, WI

Sherman—Denison, TX MSA

Grayson County, TX

Shreveport—Bossier City, LA MSA

Bossier Parish, LA
Caddo Parish, LA
Webster Parish, LA

Sioux City, IA—NE MSA

Woodbury County, IA
Dakota County, NE

Sioux Falls, SD MSA

Lincoln County, SD
Minnehaha County, SD

South Bend, IN MSA

St. Joseph County, IN

Spokane, WA MSA

Spokane County, WA

Springfield, IL MSA

Menard County, IL
Sangamon County, IL

Springfield, MO MSA

Christian County, MO
Greene County, MO
Webster County, MO

Springfield, MA MSA

Franklin County, MA (part)
Sunderland town, MA
Hampden County, MA (part)
Agawam city, MA
Chicopee city, MA

Springfield, MA MSA—Con.

Hampden County, MA (part)—Con.
 East Longmeadow town, MA
 Hampden town, MA
 Holyoke city, MA
 Longmeadow town, MA
 Ludlow town, MA
 Monson town, MA
 Montgomery town, MA
 Palmer town, MA
 Russell town, MA
 Southwick town, MA
 Springfield city, MA
 Westfield city, MA
 West Springfield town, MA
 Wilbraham town, MA
 Hampshire County, MA (part)
 Amherst town, MA
 Belchertown town, MA
 Easthampton town, MA
 Granby town, MA
 Hadley town, MA
 Hatfield town, MA
 Huntington town, MA
 Northampton city, MA
 Southampton town, MA
 South Hadley town, MA
 Ware town, MA
 Williamsburg town, MA

Stamford–Norwalk, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**State College, PA MSA**
Centre County, PA**Steubenville–Weirton, OH–WV MSA**

Jefferson County, OH
 Brooke County, WV
 Hancock County, WV

Stockton–Lodi, CA MSA
San Joaquin County, CA**Sumter, SC MSA**
Sumter County, SC**Syracuse, NY MSA**
Cayuga County, NY
Madison County, NY
Onondaga County, NY
Oswego County, NY**Tacoma, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA****Tallahassee, FL MSA**
Gadsden County, FL
Leon County, FL**Tampa–St. Petersburg–Clearwater, FL MSA**
Hernando County, FL
Hillsborough County, FL
Pasco County, FL
Pinellas County, FL**Terre Haute, IN MSA**
Clay County, IN
Vermillion County, IN
Vigo County, IN**Texarkana, TX–Texarkana, AR MSA**
Miller County, AR
Bowie County, TX**Toledo, OH MSA**

Fulton County, OH
 Lucas County, OH
 Wood County, OH

Topeka, KS MSA
Shawnee County, KS**Trenton, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****Tucson, AZ MSA**
Pima County, AZ**Tulsa, OK MSA**
Creek County, OK
Osage County, OK
Rogers County, OK
Tulsa County, OK
Wagoner County, OK**Tuscaloosa, AL MSA**
Tuscaloosa County, AL**Tyler, TX MSA**
Smith County, TX**Utica–Rome, NY MSA**
Herkimer County, NY
Oneida County, NY**Vallejo–Fairfield–Napa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA****Ventura, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA****Victoria, TX MSA**
Victoria County, TX**Vineland–Millville–Bridgeton, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Visalia–Tulare–Porterville, CA MSA**
Tulare County, CA**Waco, TX MSA**
McLennan County, TX**Washington, DC–MD–VA–WV PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA****Washington–Baltimore, DC–MD–VA–WV CMSA**
Baltimore, MD PMSA
Anne Arundel County, MD
Baltimore County, MD
Carroll County, MD
Harford County, MD
Howard County, MD
Queen Anne's County, MD
Baltimore city, MD
Hagerstown, MD PMSA
Washington County, MD
Washington, DC–MD–VA–WV PMSA
District of Columbia, DC
Calvert County, MD
Charles County, MD
Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA**Washington–Baltimore, DC–MD–VA–WV CMSA—Con.**

Washington, DC–MD–VA–WV PMSA—Con.
 Fauquier County, VA
 King George County, VA
 Loudoun County, VA
 Prince William County, VA
 Spotsylvania County, VA
 Stafford County, VA
 Warren County, VA
 Alexandria city, VA
 Fairfax city, VA
 Falls Church city, VA
 Fredericksburg city, VA
 Manassas city, VA
 Manassas Park city, VA
 Berkeley County, WV
 Jefferson County, WV

Waterbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Waterloo–Cedar Falls, IA MSA**
Black Hawk County, IA**Wausau, WI MSA**
Marathon County, WI**West Palm Beach–Boca Raton, FL MSA**
Palm Beach County, FL**Wheeling, WV–OH MSA**
Belmont County, OH
Marshall County, WV
Ohio County, WV**Wichita, KS MSA**
Butler County, KS
Harvey County, KS
Sedgwick County, KS**Wichita Falls, TX MSA**
Archer County, TX
Wichita County, TX**Williamsport, PA MSA**
Lycoming County, PA**Wilmington–Newark, DE–MD PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Wilmington, NC MSA**
Brunswick County, NC
New Hanover County, NC**Worcester, MA–CT PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****Yakima, WA MSA**
Yakima County, WA**Yolo, CA PMSA—see Sacramento–Yolo, CA CMSA****York, PA MSA**
York County, PA**Youngstown–Warren, OH MSA**
Columbiana County, OH
Mahoning County, OH
Trumbull County, OH**Yuba City, CA MSA**
Sutter County, CA
Yuba County, CA**Yuma, AZ MSA**
Yuma County, AZ

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

- Printed reports [P]
- CD-ROM [C]
- Highlights online [+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through January 1996) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available March 1996 through May 1996) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available November 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

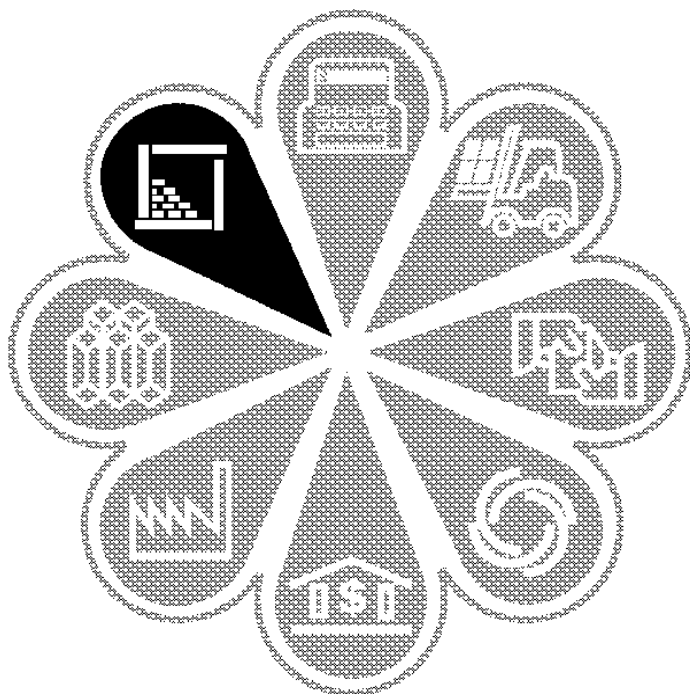
Census of Construction Industries

CC92-A-3

GEOGRAPHIC AREA SERIES

East North Central States

Illinois, Indiana, Michigan, Ohio, Wisconsin



Acknowledgments

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If you have any questions concerning the statistics in this report, call 301-457-4680.

1992

Census of

Construction Industries

CC92-A-3

GEOGRAPHIC AREA SERIES

East North Central

States

Illinois, Indiana, Michigan, Ohio, Wisconsin

Issued March 1996



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Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
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BUREAU OF THE CENSUS
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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

IV INTRODUCTION

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

CONSTRUCTION—GEOGRAPHIC AREA SERIES

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Assets and depreciation (gross book value):					
Beginning of year—buildings, machinery, and equipment	4				
End of year—total	2, 4	2	6	7	
End of year—buildings, machinery, and equipment	4				
Depreciation charges during year—buildings, machinery, and equipment	4				
Capital expenditures:					
Total capital expenditures	2, 4	2	6	7	11
New buildings—machinery and equipment	4				
Used buildings—machinery and equipment	4				
Communication services, costs for	3				
Employees:					
All employees—average number	1, 2, 3	2	6	7	11
Construction workers—average number	2, 3, 9	2, 9			
Construction workers—quarterly	3, 9	9			
Other employees—average number	3				
Other employees—quarterly	3				
Establishments:					
Number in business during year:					
All	1				
With payroll	1, 2, 3, 5, 9	2, 9	6	7	11
Without payroll	1				
Fringe benefits—legally required and voluntary expenditures	3				
Inventories	5				
Materials, components, supplies, and fuels—costs for	2, 3	2	6	7	11
Ownership—private or government owned	3				
Payroll:					
First-quarter, all employees	3				
Annual:					
All employees	2, 3	2	6	7	11
Construction workers	2, 3	2			
Other employees	3				
Power, fuels, and lubricants—costs for	3				
Proprietors and working partners:					
All establishments	1				
Establishments with payroll	1, 3				
Establishments without payroll	1				
Ratios, selected industry	10	10			
Receipts and value:					
Dollar value of business done:					
All establishments	1				
Establishments with payroll	1, 3		6	7	
Establishments without payroll	1				
Value of construction work, total	2, 3, 5, 8	2	6	7	11
For work subcontracted in from others	2, 3	2			
Other business receipts	3				

See footnotes at end of table.

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Receipts and value:—Con.					
Net value of construction work.	2, 3	2	6	7	11
Value added.	2, 3	2	6	7	11
Rental costs:					
Total.	2, 3	2	6	7	
For machinery and equipment.	3				
For buildings.	3				
Repairs to buildings and other structures.	3				
Repairs to machinery and equipment.	3				
Subcontract work to others, costs for.	2, 3	2	6	7	11
Type and class of construction ²	8				

Note: Data for 1987 and earlier years are also available in some of these tables.

¹CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan statistical area.

²Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.



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Illinois

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Illinois. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 77,399 establishments in this State operating in the construction industries. These establishments accounted for \$29.0 billion in total dollar value of business done.

Most of the 77,399 construction establishments were small. Of the total, 52,820 were nonemployers, and over half of the employer establishments had less than 5 employees. The 9,594 construction establishments with 5 employees or more, while representing only 12 percent of all establishments, accounted for more than 84 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$27.3 billion in total dollar value of business done. Of this amount, \$26.7 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$6.8 billion, leaving net value of construction work of \$19.9 billion. In addition, these establishments paid out \$8.6 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$12.6 billion. (See Introduction and appendixes for explanation of terms.)

There were 24,579 establishments with total employment averaging 211,951 during the year. Total payroll for 1992 was \$6.5 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 52,820 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$1.7 billion. Most of these establishments, about 82 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

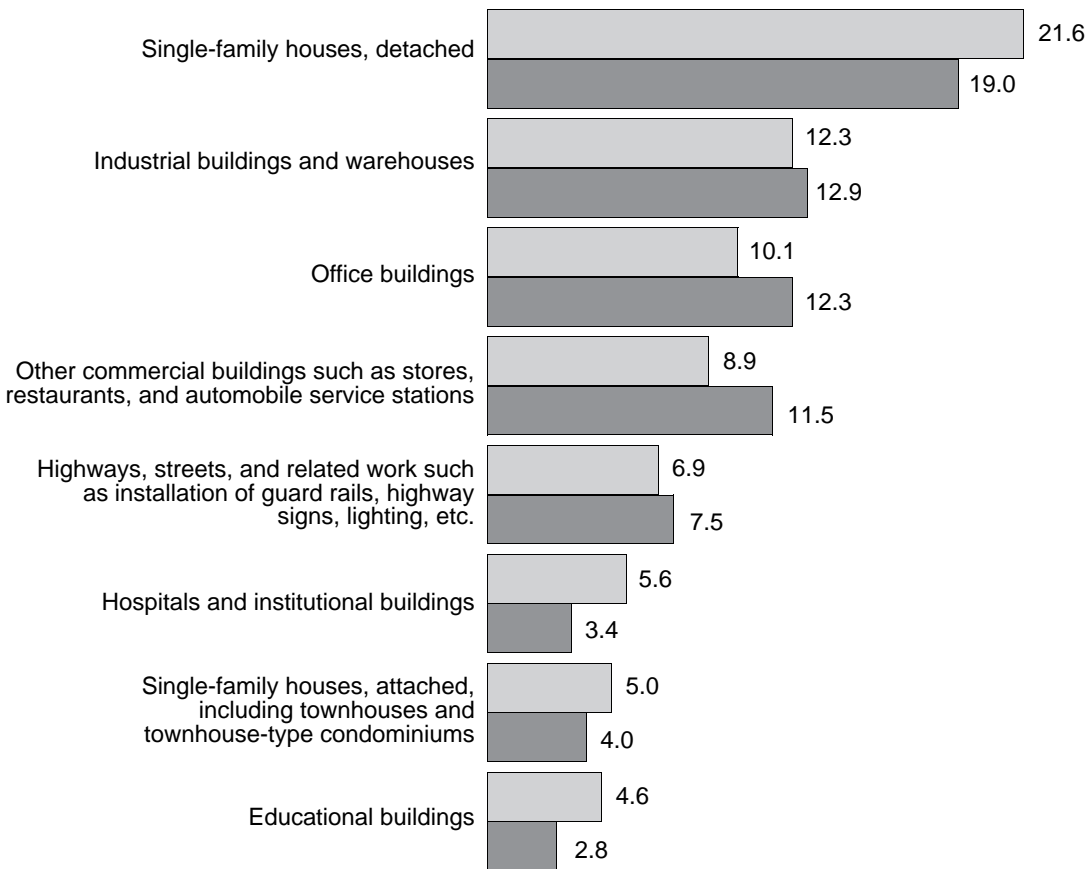




Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

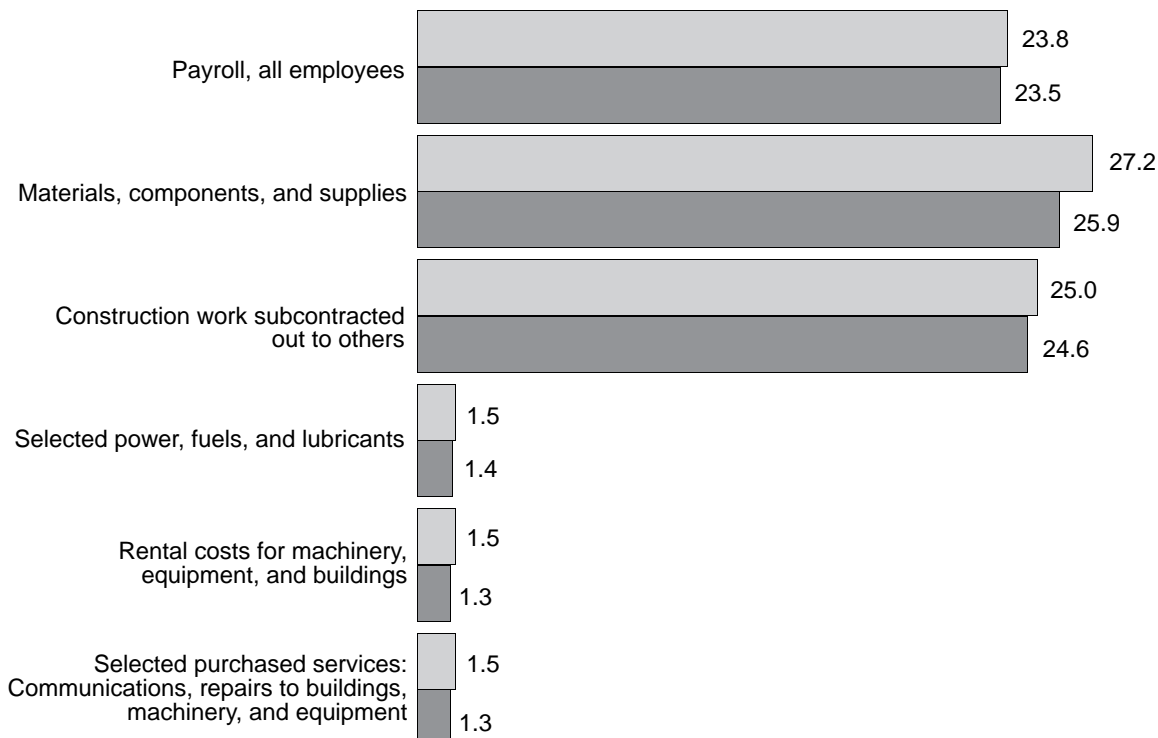


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	77 399	59 323	211 951	28 955 646	52 820	50 998	1 679 376	24 579	8 325	211 951	27 276 270	1	1
15	Building construction—General contractors and operative builders ----	15 900	10 363	43 831	10 763 405	9 023	8 007	663 637	6 877	2 356	43 831	10 099 768	1	1
16	Heavy construction other than building construction—contractors -----	1 950	1 025	29 320	4 602 949	619	597	23 771	1 331	428	29 320	4 579 178	1	1
17	Special trade contractors -----	59 549	47 935	138 800	13 589 291	43 178	42 394	991 968	16 371	5 541	138 800	12 597 323	1	1
1711	Plumbing, heating, and air-conditioning --	7 100	4 403	30 869	3 258 175	3 566	3 419	115 090	3 534	984	30 869	3 143 085	1	1
1731	Electrical work-----	5 725	3 709	23 636	2 428 111	3 389	3 217	76 760	2 336	492	23 636	2 351 351	1	1
	1987													
15, 16, 17	Construction industries² -----	71 913	54 989	209 154	26 212 664	51 341	50 420	2 918 968	20 572	4 569	209 154	23 293 696	1	1
15	Building construction—General contractors and operative builders ----	15 039	9 924	47 253	9 739 629	9 655	8 829	941 197	5 384	1 095	47 253	8 798 432	2	1
16	Heavy construction other than building construction—contractors -----	1 786	773	25 413	3 540 334	549	561	163 378	1 237	212	25 413	3 376 956	1	1
17	Special trade contractors -----	53 727	43 094	135 402	12 262 824	40 063	39 848	1 313 196	13 664	3 246	135 402	10 949 628	1	1
1711	Plumbing, heating, and air-conditioning --	6 807	4 408	28 475	2 804 288	3 691	3 626	173 714	3 116	782	28 475	2 630 574	1	1
1731	Electrical work-----	4 840	3 159	23 636	2 093 251	2 959	2 895	103 719	1 881	264	23 636	1 989 532	1	1

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	24 579	211 951	161 927	6 492 735	4 648 497	26 738 481	19 913 253	12 631 107
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4 238	15 598	11 341	303 767	202 627	1 849 065	1 340 010	696 742
1522	Other residential buildings -----	305	1 595	1 103	43 240	25 236	280 342	148 621	87 584
1531	Operative builders -----	707	5 751	2 288	198 116	52 514	2 358 890	1 282 865	828 698
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	325	5 053	3 915	171 374	116 275	1 044 851	512 898	322 073
1542	Nonresidential buildings, n.e.c. -----	1 301	15 834	10 818	537 765	338 703	4 330 652	1 590 374	985 411
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	437	10 569	8 553	383 089	279 735	1 702 714	1 359 777	826 038
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	52	3 062	2 594	128 128	100 380	552 142	414 404	283 334
1623	Water, sewer, and utility lines -----	369	7 401	6 091	277 275	218 916	963 444	817 951	581 041
1629	Heavy construction, n.e.c. -----	472	8 288	6 760	284 321	216 804	1 201 560	950 168	732 228
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	3 534	30 869	22 344	989 520	713 580	3 106 163	2 817 296	1 726 829
1721	Painting and paper hanging -----	1 351	6 852	5 665	177 844	141 410	419 478	394 352	296 801
1731	Electrical work -----	2 336	23 636	18 390	845 207	638 089	2 333 980	2 218 217	1 412 000
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	1 092	8 125	7 084	215 899	174 700	569 691	548 952	362 927
1742	Plastering, drywall, and insulation work -----	662	8 131	6 777	248 242	193 627	667 049	615 737	407 341
1743	Terrazzo, tile, marble, and mosaic work -----	198	1 446	1 106	41 914	31 191	125 019	117 042	70 465
175	Carpentry and floor work:								
1751	Carpentry -----	1 863	11 230	9 110	286 304	220 239	866 503	795 754	469 694
1752	Floor laying and other floor work -----	489	2 907	2 144	80 313	55 636	274 873	257 151	147 985
1761	Roofing, siding, and sheet metal work -----	1 324	10 928	8 508	309 792	218 188	1 013 654	927 824	563 689
1771	Concrete work -----	1 437	11 330	9 312	298 103	227 333	1 053 357	963 041	545 554
1781	Water well drilling -----	96	582	409	15 665	10 839	49 335	48 790	30 036
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	149	2 620	2 121	80 685	60 669	226 170	207 463	143 382
1793	Glass and glazing work -----	173	1 483	921	44 112	26 635	136 430	132 329	75 579
1794	Excavation work -----	561	3 358	2 661	103 273	78 796	367 033	322 326	235 480
1795	Wrecking and demolition work -----	62	1 602	1 312	34 519	27 266	98 876	85 152	74 209
1796	Installing building equipment, n.e.c. -----	171	4 440	3 416	150 274	107 978	406 473	382 993	266 382
1799	Special trade contractors, n.e.c. -----	874	9 263	7 183	243 996	171 133	740 734	661 767	459 605

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
7 819 936	6 825 228	7 811 901	403 411	409 781	3 857 656	209 154	22 575 712	10 927 571	1	1	2	15, 16, 17
												15
686 090	509 055	82 812	15 723	21 665	129 481	13 514	1 392 960	549 697	3	4	14	152
62 246	131 721	2 516	1 708	2 195	23 893	2 489	355 627	94 023	9	8	31	1521
499 488	1 076 026	10 691	5 344	10 139	119 026	4 552	1 702 600	449 830	5	4	13	1531
221 356	531 953	106 068	8 818	7 878	82 338	4 808	776 477	203 067	4	4	24	154
721 049	2 740 278	162 430	26 806	30 693	240 501	21 890	4 172 725	1 257 118	2	2	16	1542
												16
596 052	342 937	340 277	68 700	51 673	630 121	11 351	1 543 635	798 258	2	1	4	1611
132 490	137 738	30 552	11 897	11 344	132 178	2 393	257 699	111 479	3	8	3	162
249 059	145 494	162 380	26 007	36 430	336 948	5 715	657 443	353 466	3	2	8	1622
301 375	251 392	168 529	41 926	33 595	433 413	5 954	826 500	483 592	2	1	7	1623
												17
1 127 389	288 867	1 466 429	41 276	38 963	365 717	28 475	2 596 230	1 407 347	1	2	7	1711
99 412	25 126	190 895	5 520	5 855	55 891	7 999	428 609	322 896	4	3	17	1721
823 587	115 763	1 407 588	30 878	34 545	253 435	23 636	1 970 662	1 264 271	1	1	8	1731
(D)	20 739	389 881	8 023	8 414	76 348	7 644	483 462	313 376	3	3	13	174
212 219	51 312	564 434	8 582	6 667	56 086	9 706	648 472	426 387	3	3	13	1741
48 879	7 977	87 274	1 773	868	10 513	1 278	98 316	60 057	5	4	18	1742
												175
335 875	70 750	485 828	9 173	11 955	80 720	11 316	820 248	462 223	3	3	24	1751
113 455	17 722	177 454	6 790	5 380	33 303	2 597	234 677	128 879	6	4	26	1752
374 091	85 830	470 841	16 515	16 384	131 896	10 868	828 243	495 388	3	3	13	1761
423 284	90 316	625 068	20 563	30 013	241 224	12 599	1 118 152	610 875	3	3	10	1771
18 839	545	15 311	798	2 326	27 140	508	44 119	26 919	9	7	13	1781
												179
69 586	18 707	188 771	7 858	3 059	33 401	2 839	240 950	160 461	5	4	19	1791
65 091	4 102	100 313	3 101	1 067	12 662	1 385	107 588	60 702	6	4	20	1793
94 668	44 708	211 205	12 017	16 119	179 785	3 287	332 725	235 522	4	4	12	1794
(D)	13 724	43 060	3 441	3 432	26 701	895	81 489	74 728	3	4	(Z)	1795
120 574	23 480	103 707	6 768	4 505	36 797	3 834	310 011	217 480	2	1	13	1796
210 713	78 967	217 586	13 408	14 616	108 141	6 536	443 312	295 541	7	4	6	1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	24 579	20 572	18 318	21 048	(Z)	1	1	2
Proprietors and working partners.....	8 325	4 569	6 238	11 835	2	3	3	3
All employees**	211 951	209 154	170 822	210 454	1	1	1	1
Construction workers:								
March.....	138 315	144 192	115 415	144 126	1	1	1	1
May	168 152	167 051	139 635	182 616	1	1	1	1
August	180 037	182 437	148 680	196 274	1	1	1	1
November.....	161 203	169 240	136 550	178 238	1	1	1	1
Average.....	161 927	165 730	136 888	175 461	1	1	1	1
Other employees:								
March.....	49 594	42 161	33 677	33 560	1	1	1	1
May	49 905	43 246	(NA)	(NA)	1	1	(NA)	(NA)
August	50 813	44 496	(NA)	(NA)	1	1	(NA)	(NA)
November.....	49 784	43 796	(NA)	(NA)	1	1	(NA)	(NA)
Average.....	50 024	43 425	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	6 492 735	5 482 516	3 763 634	3 338 788	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	4 648 497	4 038 240	2 914 586	2 659 319	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	1 844 238	1 444 275	849 047	679 469	1	1	1	(Z)
First-quarter payroll, all employees	1 360 950	1 174 245	807 417	647 992	1	(Z)	(Z)	(Z)
Fringe benefits, all employees	1 874 894	1 375 032	667 616	677 138	1	(Z)	(Z)	(Z)
Legally required expenditures.....	1 100 881	868 077	516 116	347 828	1	(Z)	(Z)	(Z)
Voluntary expenditures.....	774 014	506 954	151 500	329 309	1	1	1	(Z)
Dollar value of business done	27 276 270	23 293 696	13 462 761	12 337 808	1	1	(Z)	(Z)
Value of construction work	26 738 481	22 575 712	13 109 617	11 866 811	1	1	(Z)	(Z)
Value of construction work subcontracted in from others	7 811 901	5 739 440	3 091 035	3 072 880	1	1	1	1
Other business receipts.....	537 790	438 908	297 953	470 997	2	2	1	3
Net value of construction†	19 913 253	16 844 405	10 119 024	9 125 152	1	(Z)	(Z)	(Z)
Value added††.....	12 631 107	10 927 571	6 568 407	5 631 498	1	1	(Z)	(Z)
Selected costs.....	14 645 164	12 087 049	6 839 163	6 511 678	1	1	(Z)	1
Materials, components, and supplies	7 416 479	6 022 245	3 580 983	3 587 580	1	1	1	1
Construction work subcontracted out to others	6 825 228	5 731 306	2 990 592	2 741 659	1	1	1	1
Selected power, fuels, and lubricants.....	403 456	333 497	267 587	182 438	1	1	1	1
Electricity.....	76 648	45 583	35 584	23 518	1	1	1	1
Natural gas.....	31 542	24 059	20 120	15 743	2	1	1	2
Gasoline and diesel fuel	273 513	241 251	195 522	120 245	1	1	1	1
On highway use.....	194 178	171 622	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use.....	79 336	69 629	(NA)	(NA)	1	1	(NA)	(NA)
Other, including lubricating oils and greases.....	21 753	22 603	16 359	22 934	2	2	1	2
Rental cost for machinery, equipment, and buildings	403 411	303 602	167 658	142 012	2	1	1	1
For machinery and equipment	260 297	205 571	118 194	112 773	2	2	1	1
For buildings.....	143 114	98 030	49 464	29 239	2	2	2	1
Selected purchased services	422 474	312 334	210 024	199 444	2	1	1	5
Communication services	129 322	85 847	55 974	61 493	3	2	1	15
Repairs to buildings and other structures	29 611	19 834	11 545	10 754	13	3	3	5
Repairs to machinery and equipment	263 542	206 653	142 505	127 197	2	1	1	2
Ownership of construction projects:								
Value of construction work	26 738 481	22 575 712	13 109 617	11 866 811	1	1	(Z)	(Z)
Government owned	6 529 424	4 530 383	2 916 357	2 315 532	1	1	1	1
Federal	1 306 604	950 073	(NA)	(NA)	2	3	(NA)	(NA)
State and local	5 222 819	3 580 309	(NA)	(NA)	2	1	(NA)	(NA)
Privately owned	20 209 057	18 045 329	10 193 260	9 551 279	1	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	3 598 532	2 460 877	1	2
Capital expenditures, other than land -----	409 781	365 010	2	2
New -----	327 521	295 739	2	2
Used -----	82 259	69 271	7	4
Retirements and disposition of depreciable assets -----	150 656	107 297	3	6
End-of-year gross book value of depreciable assets -----	3 857 656	2 718 590	1	2
Depreciation charges during year -----	408 228	297 516	1	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	502 036	490 336	3	6
Capital expenditures, other than land -----	33 969	54 795	8	6
New buildings and other structures -----	26 991	45 417	7	7
Used buildings and other structures -----	6 978	9 378	28	10
Retirements and disposition of depreciable assets -----	14 558	18 604	13	18
End-of-year gross book value of depreciable assets -----	521 447	526 527	3	5
Depreciation charges during year -----	35 697	44 315	3	13
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	3 096 496	1 970 540	1	1
Capital expenditures, other than land -----	375 811	310 214	2	2
New machinery and equipment, including automobiles and trucks -----	300 530	250 321	3	2
New automobiles and trucks, intended primarily for highway use -----	110 994	117 205	5	3
Used machinery and equipment, including automobiles and trucks -----	75 281	59 893	7	4
Retirements and disposition of depreciable assets -----	136 098	88 692	3	6
End-of-year gross book value of depreciable assets -----	3 336 210	2 192 063	1	1
Depreciation charges during year -----	372 532	253 200	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	24 579	(Z)
Value of construction work	26 738 481	1
Establishments with inventories:		
Number	8 204	2
Value of construction work	12 493 647	1
Inventories ¹ :		
End of 1992, materials and supplies	416 752	7
End of 1991, materials and supplies	378 251	5
Establishments with no inventories:		
Number	8 922	2
Value of construction work	9 466 797	1
Establishments not reporting:		
Number	7 453	2
Value of construction work	4 778 036	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	
1992										
Number of establishments -----	24 579	14 985	5 061	2 440	1 442	424	175	41	9	2
All employees** -----	211 951	29 221	32 557	32 422	42 142	28 508	25 094	13 824	8 184	(D)
Payroll, all employees -----	6 492 735	546 455	787 827	948 544	1 412 073	1 072 557	961 889	470 379	293 011	(D)
Dollar value of business done -----	27 276 270	2 923 257	3 437 052	3 813 323	5 412 842	3 903 604	4 144 592	2 090 543	1 551 057	(D)
Value of construction work -----	26 738 481	2 879 791	3 368 094	3 748 979	5 325 676	3 814 921	4 066 595	2 071 024	1 463 401	(D)
Net value of construction work† -----	19 913 253	2 289 401	2 606 705	2 938 204	4 022 341	2 973 358	2 764 811	1 411 562	906 872	(D)
Value added†† -----	12 631 107	1 312 764	1 519 753	1 810 344	2 513 882	1 960 104	1 908 016	828 656	777 588	(D)
Cost of materials, components, supplies, and fuels -----	7 819 936	1 020 104	1 155 910	1 192 204	1 595 625	1 101 937	934 791	602 425	216 940	(D)
Cost of construction work subcontracted out to others -----	6 825 228	590 390	761 389	810 775	1 303 335	841 563	1 301 785	659 463	556 529	(D)
Rental cost for machinery, equipment, and buildings -----	403 411	36 828	48 379	52 867	74 890	64 569	53 643	51 168	21 068	(D)
Capital expenditures, other than land -----	409 781	55 149	62 203	61 368	72 785	61 280	47 057	33 422	16 515	(D)
End-of-year gross book value of depreciable assets -----	3 857 656	419 139	457 235	535 322	773 093	651 596	566 822	327 869	126 580	(D)
1987										
All employees** -----	209 154	23 487	29 767	33 595	43 071	29 112	28 575	13 659	7 885	(D)
Value of construction work -----	22 575 712	2 197 235	2 600 193	3 156 444	4 789 060	3 600 654	3 716 304	1 786 950	728 871	(D)
Value added†† -----	10 927 571	971 478	1 263 357	1 591 264	2 401 230	1 763 118	1 676 894	873 809	386 420	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	2	3	3	2	1	1	5	(Z)	(D)
Net value of construction work† -----	1	3	3	3	1	(Z)	(Z)	2	(Z)	(D)
Capital expenditures, other than land -----	2	8	11	7	3	(Z)	1	(Z)	(Z)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	24 579	(S)	(S)	3 290	6 460	4 544	2 918	2 530	967	567	399
All employees** -----	211 951	(S)	(S)	5 187	17 990	21 829	23 713	35 038	26 111	26 395	53 036
Payroll, all employees -----	6 492 735	(S)	(S)	66 595	291 479	445 105	598 295	1 048 231	894 116	1 014 949	2 109 795
Dollar value of business done -----	27 276 270	(S)	(S)	240 330	1 048 886	1 593 459	2 045 024	3 824 624	3 301 515	3 923 630	11 224 064
Value of construction work -----	26 738 481	(S)	(S)	237 248	1 038 826	1 570 036	2 017 010	3 751 105	3 247 131	3 862 710	10 940 083
Net value of construction work† -----	19 913 253	(S)	(S)	222 477	953 888	1 398 913	1 777 221	3 084 874	2 616 975	2 915 613	6 873 479
Value added†† -----	12 631 107	(S)	(S)	141 845	567 119	829 946	1 086 433	1 861 607	1 628 876	1 874 687	4 596 496
Cost of materials, components, supplies, and fuels -----	7 819 936	(S)	(S)	83 714	396 830	592 390	718 803	1 296 786	1 042 482	1 101 847	2 560 963
Cost of construction work subcontracted out to others -----	6 825 228	(S)	(S)	14 771	84 937	171 123	239 789	666 231	630 156	947 097	4 066 605
Rental cost for machinery, equipment, and buildings -----	403 411	(S)	(S)	3 097	14 016	26 162	36 438	64 077	43 035	56 202	159 688
Capital expenditures, other than land -----	409 781	(S)	(S)	(S)	23 099	36 665	43 313	72 324	40 005	62 168	124 838
End-of-year gross book value of depreciable assets -----	3 857 656	(S)	(S)	51 984	165 494	269 290	358 220	584 476	452 296	575 790	1 382 350
1987											
All employees** -----	209 154	(S)	(S)	(S)	17 109	20 293	23 707	34 617	27 504	25 240	52 928
Value of construction work -----	22 575 712	(S)	(S)	(S)	867 753	1 273 612	1 821 067	3 271 615	3 183 695	3 104 615	8 794 091
Value added†† -----	10 927 571	(S)	(S)	(S)	491 908	708 911	990 251	1 713 013	1 642 872	1 566 941	3 660 122
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	5	4	4	4	2	1	1	1
Net value of construction work† -----	1	(S)	(S)	4	3	4	4	3	2	2	(Z)
Capital expenditures, other than land -----	2	(S)	(S)	(S)	11	11	11	9	4	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	26 738 481	15 398 343	6 885 270	3 661 206	1	1	1	1
Building construction	20 164 719	12 220 234	5 353 997	2 590 488	1	1	1	2
Single-family houses	7 132 665	5 264 318	1 160 898	707 448	2	2	3	4
Single-family houses, detached	5 782 951	4 154 072	1 036 004	592 875	2	2	3	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	1 349 714	1 110 246	124 895	114 573	4	5	8	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	681 524	289 850	227 185	164 488	3	5	5	5
Other residential buildings, including hotels, motels, and tourist cabins	288 460	138 804	90 886	58 770	4	3	7	14
Office buildings	2 694 667	1 349 636	987 060	357 970	1	2	2	2
Other commercial buildings such as stores, restaurants, and automobile service stations	2 392 712	1 385 542	638 578	368 592	2	2	3	4
Industrial buildings and warehouses	3 291 498	1 781 969	969 100	540 429	2	2	2	2
Industrial buildings	2 673 907	1 360 186	843 917	469 804	2	3	2	2
Warehouses	617 592	421 783	125 183	70 625	2	3	3	4
Religious buildings	257 573	116 119	100 937	40 516	2	2	5	4
Educational buildings	1 217 362	563 392	505 779	148 192	4	2	9	7
Hospitals and institutional buildings	1 498 548	853 493	517 295	127 760	1	2	3	3
Amusement, social, and recreational buildings, indoors	187 390	117 293	48 483	21 614	4	6	4	9
Other nonresidential buildings	522 321	359 817	107 795	54 709	3	3	6	12
Nonbuilding construction	5 780 100	3 178 110	1 531 272	1 070 718	1	1	1	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 853 218	783 052	608 429	461 737	1	1	1	2
Private driveways and parking areas	262 614	130 402	50 981	81 230	8	10	15	19
Bridges, tunnels, and elevated highways	597 260	350 224	211 045	35 991	6	11	(Z)	8
Tunnels	206 080	204 735	1 345	—	18	19	24	—
Bridges and elevated highways	391 180	145 489	209 700	35 991	1	(Z)	(Z)	8
Conservation and development construction	246 519	207 925	21 613	16 980	3	3	8	8
Power and communication transmission lines, towers, and related facilities	241 282	151 496	44 481	(S)	5	6	9	(S)
Sewers, water mains, and related facilities	754 733	544 490	124 216	86 028	3	4	5	6
Sewers, sewer lines, septic systems, and related facilities	475 843	348 286	77 439	50 117	3	4	2	9
Water mains and related facilities	278 890	196 203	46 777	35 910	6	7	12	6
Pipeline construction other than sewer or water lines	267 545	220 035	32 445	15 064	(Z)	(Z)	(Z)	(Z)
Blast furnaces, petroleum refineries, chemical complexes, etc.	341 689	126 951	92 699	122 039	1	(Z)	2	3
Power plants	336 292	105 583	138 368	92 341	2	1	(Z)	6
Power plants, nuclear	148 771	9 560	(D)	(D)	(Z)	(Z)	(D)	(D)
Power plants and cogeneration plants, except nuclear	187 520	96 022	(D)	(D)	3	1	(D)	(D)
Sewage treatment and water treatment plants	323 538	204 382	106 678	12 477	2	3	2	11
Other nonbuilding construction	555 411	353 569	100 317	101 525	3	3	2	4
Construction work, n.s.k.	793 662	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
1987								
Value of construction work	22 575 712	14 091 240	4 817 260	2 855 353	1	1	1	1
Building construction	17 214 703	11 529 775	3 610 898	2 074 030	1	1	1	2
Single-family houses	5 200 568	3 994 122	709 312	497 134	2	2	4	4
Single-family houses, detached	4 287 698	3 188 149	662 651	436 897	2	3	4	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	912 869	805 973	46 660	60 236	4	4	9	8
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	957 979	706 635	134 314	117 029	2	2	4	4
Other residential buildings, including hotels, motels, and tourist cabins	572 263	399 463	110 607	62 192	3	3	6	5
Office buildings	2 778 084	1 783 419	694 869	299 795	1	1	3	2
Other commercial buildings such as stores, restaurants, and automobile service stations	2 607 050	1 696 355	583 240	327 454	2	2	2	4
Industrial buildings and warehouses	2 910 378	1 746 326	692 962	471 090	1	1	1	2
Industrial buildings	2 487 518	1 457 184	611 682	418 651	1	1	1	2
Warehouses	422 860	289 142	81 279	52 438	3	3	5	4
Religious buildings	213 699	104 928	64 868	43 902	3	4	5	5
Educational buildings	634 445	255 883	273 079	105 482	2	2	2	5
Hospitals and institutional buildings	765 066	421 735	260 364	82 965	2	2	3	3
Amusement, social, and recreational buildings, indoors	169 792	128 493	23 718	17 580	2	1	7	12
Other nonresidential buildings	405 379	292 416	63 565	49 407	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	4 549 151	2 561 465	1 206 362	781 324	1	1	1	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 690 681	734 956	558 068	397 655	1	2	1	3
Private driveways and parking areas	168 206	101 491	31 026	35 688	8	9	15	11
Bridges, tunnels, and elevated highways	314 201	209 003	(D)	(D)	2	2	(D)	(D)
Tunnels	57 986	48 230	(D)	(D)	1	1	(D)	(D)
Bridges and elevated highways	256 214	160 773	70 560	24 880	2	3	1	7
Power and communication transmission lines, towers, and related facilities	91 133	45 865	27 801	17 465	7	8	13	8
Sewers, water mains, and related facilities	580 991	443 936	87 559	49 496	3	3	4	6
Sewers, sewer lines, septic systems, and related facilities	407 787	307 273	65 819	34 695	3	3	4	7
Water mains and related facilities	173 204	136 662	21 739	14 801	3	4	8	9
Pipeline construction other than sewer or water lines	103 208	69 170	19 976	14 061	1	1	1	5
Blast furnaces, petroleum refineries, chemical complexes, etc.	232 976	119 079	62 163	51 734	1	(Z)	2	4
Power plants	370 512	196 918	129 679	43 914	1	2	1	3
Power plants, nuclear	169 395	(D)	(D)	22 514	(Z)	(D)	(D)	1
Power plants and cogeneration plants, except nuclear	201 117	(D)	(D)	21 400	2	(D)	(D)	7
Sewage treatment and water treatment plants	463 509	324 721	122 923	15 863	3	3	7	11
Other nonbuilding construction	533 734	316 326	96 055	121 363	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	811 857	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	24 579	161 927	138 315	168 152	180 037	161 203	(Z)	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	4 238	11 341	10 303	11 628	12 368	11 066	2	3	3	3	3	3
1522	Other residential buildings -----	305	1 103	1 094	1 145	1 169	1 006	12	9	8	9	10	9
1531	Operative builders -----	707	2 288	2 172	2 391	2 397	2 195	7	6	6	6	6	6
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	325	3 915	3 789	3 699	4 242	3 931	11	4	4	4	5	6
1542	Nonresidential buildings, n.e.c. -----	1 301	10 818	9 855	10 686	11 897	10 835	5	3	3	2	3	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	437	8 553	3 858	10 105	11 646	8 606	8	2	2	2	2	2
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	52	2 594	1 878	2 864	3 157	2 479	10	3	4	3	2	3
1623	Water, sewer, and utility lines -----	369	6 091	4 612	6 306	6 928	6 519	8	3	2	3	3	3
1629	Heavy construction, n.e.c. -----	472	6 760	5 777	7 269	7 509	6 487	8	2	2	2	2	2
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	3 534	22 344	20 874	22 327	23 869	22 305	2	1	1	2	2	2
1721	Painting and paper hanging -----	1 351	5 665	4 756	5 962	6 645	5 297	2	4	3	5	5	3
1731	Electrical work -----	2 336	18 390	17 721	18 366	19 230	18 242	2	1	1	1	1	1
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	1 092	7 084	5 908	7 683	7 679	7 068	4	3	4	4	3	4
1742	Plastering, drywall, and insulation work -----	662	6 777	6 401	6 808	7 001	6 898	5	3	4	3	4	4
1743	Terrazzo, tile, marble, and mosaic work -----	198	1 106	1 104	1 099	1 155	1 066	11	5	5	5	6	5
175	Carpentry and floor work:												
1751	Carpentry -----	1 863	9 110	7 867	9 457	10 065	9 051	3	3	3	3	3	3
1752	Floor laying and other floor work -----	489	2 144	1 967	2 165	2 266	2 178	6	6	6	7	7	7
1761	Roofing, siding, and sheet metal work -----	1 324	8 508	6 809	9 031	9 627	8 563	4	3	3	3	3	3
1771	Concrete work -----	1 437	9 312	5 994	10 191	11 203	9 858	3	3	4	3	3	3
1781	Water well drilling -----	96	409	387	403	430	416	10	8	9	9	9	8
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	149	2 121	1 953	2 137	2 378	2 015	10	5	5	4	4	5
1793	Glass and glazing work -----	173	921	909	911	944	921	9	7	8	7	7	7
1794	Excavation work -----	561	2 661	2 054	2 889	3 064	2 635	7	5	5	4	5	5
1795	Wrecking and demolition work -----	62	1 312	1 220	1 266	1 505	1 257	20	2	2	2	2	2
1796	Installing building equipment, n.e.c. -----	171	3 416	3 690	3 145	3 359	3 469	6	2	2	3	2	2
1799	Special trade contractors, n.e.c. -----	874	7 183	5 364	8 221	8 303	6 842	7	9	5	13	11	6

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.6	30.6	165.1	.243	.292	.255	.292	.015
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.7	19.5	163.0	.164	.371	.275	.045	.009
1522	Other residential buildings -----	5.2	27.1	254.2	.154	.222	.470	.009	.006
1531	Operative builders -----	8.1	34.4	1 031.0	.084	.212	.456	.005	.002
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	15.5	33.9	266.9	.164	.212	.509	.102	.008
1542	Nonresidential buildings, n.e.c. -----	12.2	34.0	400.3	.124	.166	.633	.038	.006
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	24.2	36.2	199.1	.225	.350	.201	.200	.040
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	59.4	41.8	212.9	.232	.240	.249	.055	.022
1623	Water, sewer, and utility lines -----	20.0	37.5	158.2	.288	.259	.151	.169	.027
1629	Heavy construction, n.e.c. -----	17.5	34.3	177.7	.237	.251	.209	.140	.035
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.7	32.1	139.0	.319	.363	.093	.472	.013
1721	Painting and paper hanging -----	5.1	26.0	74.0	.424	.237	.060	.455	.013
1731	Electrical work -----	10.1	35.8	126.9	.362	.353	.050	.603	.013
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	7.4	26.6	80.4	.379	(D)	.036	.684	.014
1742	Plastering, drywall, and insulation work -----	12.3	30.5	98.4	.372	.318	.077	.846	.013
1743	Terrazzo, tile, marble, and mosaic work -----	7.3	29.0	113.0	.335	.391	.064	.698	.014
175	Carpentry and floor work:								
1751	Carpentry -----	6.0	25.5	95.1	.330	.388	.082	.561	.011
1752	Floor laying and other floor work -----	6.0	27.6	128.2	.292	.413	.064	.646	.025
1761	Roofing, siding, and sheet metal work -----	8.3	28.3	119.1	.306	.369	.085	.464	.016
1771	Concrete work -----	7.9	26.3	113.1	.283	.402	.086	.593	.020
1781	Water well drilling -----	6.1	26.9	120.6	.318	.382	.011	.310	.016
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	17.5	30.8	106.6	.357	.308	.083	.835	.035
1793	Glass and glazing work -----	8.6	29.7	148.1	.323	.477	.030	.735	.023
1794	Excavation work -----	6.0	30.8	137.9	.281	.258	.122	.575	.033
1795	Wrecking and demolition work -----	25.7	21.5	75.4	.349	(D)	.139	.435	.035
1796	Installing building equipment, n.e.c. -----	26.0	33.8	119.0	.370	.297	.058	.255	.017
1799	Special trade contractors, n.e.c. -----	10.6	26.3	103.1	.329	.284	.107	.294	.018

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHICAGO–GARY–KENOSHA, IL–IN–WI CMSA											
15,16,17	Construction industries	17 461	168 121	5 399 233	22 184 439	16 162 846	10 365 237	6 228 715	6 021 593	279 047	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	2 885	11 080	233 167	1 376 443	983 916	527 016	491 491	392 527	12 220	4	4
1522	Other residential buildings	243	1 227	33 414	237 423	116 365	73 322	43 972	121 059	1 346	10	9
1531	Operative builders	548	5 255	184 956	2 318 036	1 243 261	803 724	478 592	1 074 775	9 348	5	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	234	3 719	137 975	904 972	414 983	257 419	187 174	489 989	6 576	5	3
1542	Nonresidential buildings, n.e.c.	856	12 245	444 751	3 659 631	1 234 914	792 052	543 363	2 424 717	21 504	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	201	5 458	221 418	1 017 241	780 051	478 541	349 073	237 189	25 837	2	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	30	1 974	86 144	374 933	273 385	189 102	84 397	101 548	6 403	4	12
1623	Water, sewer, and utility lines	239	4 256	170 523	590 859	506 731	336 813	181 403	84 128	19 833	3	2
1629	Heavy construction, n.e.c.	(S)	7 450	269 993	1 088 583	843 673	664 918	244 021	244 910	21 311	1	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	2 446	25 623	867 194	2 657 598	2 406 530	1 506 359	924 498	251 067	29 898	2	2
1721	Painting and paper hanging.....	996	5 830	161 165	375 898	343 850	263 365	82 935	32 048	6 311	4	3
1731	Electrical work	1 723	19 593	727 771	1 992 008	1 885 342	1 200 925	691 395	106 666	21 936	1	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work.....	816	6 484	184 849	484 270	464 542	311 663	154 936	19 728	7 013	3	4
1742	Plastering, drywall, and insulation work	506	6 676	208 099	564 077	518 750	339 914	180 603	45 328	5 270	3	4
1743	Terrazzo, tile, marble, and mosaic work	157	1 237	35 821	104 163	(D)	61 701	37 746	(D)	695	5	(D)
175	Carpentry and floor work:											
1751	Carpentry	1 357	9 556	259 590	761 948	698 659	420 608	284 683	63 288	10 802	3	3
1752	Floor laying and other floor work	395	2 687	77 301	262 710	244 966	137 171	110 431	17 744	5 292	6	4
1761	Roofing, siding, and sheet metal work	946	8 807	261 216	842 191	768 463	467 465	307 554	73 728	12 749	3	4
1771	Concrete work	1 095	8 991	244 995	868 094	788 541	441 503	351 094	79 553	21 069	3	3
1781	Water well drilling	54	421	13 407	39 793	(D)	24 851	14 483	(D)	1 904	9	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	102	1 833	64 863	177 653	161 900	112 839	53 591	15 753	2 714	6	2
1793	Glass and glazing work	151	1 372	41 712	126 986	122 562	70 719	59 204	4 424	850	6	4
1794	Excavation work	351	2 531	85 334	285 719	257 998	189 803	73 018	27 721	14 145	5	4
1795	Wrecking and demolition work	(S)	1 529	32 845	89 343	(D)	70 086	23 211	(D)	3 295	3	(D)
1796	Installing building equipment, n.e.c.	131	3 704	129 286	353 616	333 078	230 855	105 977	20 538	3 408	2	1
1799	Special trade contractors, n.e.c.	730	8 584	221 445	630 249	554 850	392 504	169 869	75 399	7 318	8	5
	Chicago, IL PMSA											
15,16,17	Construction industries	15 745	150 021	4 872 634	20 279 362	14 635 290	9 343 621	5 695 384	5 644 072	248 879	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	2 560	9 842	209 107	1 220 944	863 301	465 334	429 830	357 644	10 099	4	5
1522	Other residential buildings	213	1 105	31 755	227 106	(D)	69 696	41 117	(D)	(D)	11	(D)
1531	Operative builders	499	4 876	176 783	2 159 407	1 156 131	762 398	428 183	1 003 276	8 671	6	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	225	3 076	113 165	801 807	356 770	225 002	160 800	445 037	5 907	5	4
1542	Nonresidential buildings, n.e.c.	793	11 075	408 776	3 496 800	1 144 177	728 302	515 489	2 352 623	20 255	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	177	4 886	200 986	922 682	708 506	429 717	322 565	214 176	24 062	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	28	(D)	(D)	(D)	(D)	(D)	(D)	101 548	(D)	(D)	(D)
1623	Water, sewer, and utility lines	219	3 973	162 336	562 320	482 297	317 730	175 918	80 023	16 623	3	2
1629	Heavy construction, n.e.c.	(S)	5 048	181 448	808 867	614 071	482 339	195 036	194 796	15 667	2	2

IL–14 ILLINOIS

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHICAGO–GARY–KENOSHA, IL–IN–WI CMSA—Con.											
	Chicago, IL PMSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	2 192	22 542	763 848	2 375 461	2 151 693	1 329 811	842 964	223 768	27 269	2	2
1721	Painting and paper hanging	903	5 049	138 323	314 777	(D)	227 117	68 773	(D)	3 977	5	(D)
1731	Electrical work	1 590	17 611	665 856	1 820 725	1 721 990	1 095 274	632 915	98 735	20 523	2	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	750	6 048	172 969	446 868	428 617	284 281	146 040	18 251	6 789	3	4
1742	Plastering, drywall, and insulation work	461	6 345	199 609	542 439	497 948	326 814	172 902	44 490	5 193	4	4
1743	Terrazzo, tile, marble, and mosaic work	152	1 224	35 558	103 416	(D)	61 317	37 398	(D)	695	5	(D)
175	Carpentry and floor work:											
1751	Carpentry	1 204	8 859	246 348	705 477	650 786	390 966	266 038	54 692	9 720	3	3
1752	Floor laying and other floor work	355	2 496	73 007	246 706	230 210	129 464	102 935	16 495	5 179	6	5
1761	Roofing, siding, and sheet metal work	850	7 857	238 096	767 995	697 635	424 708	279 345	70 360	11 960	3	4
1771	Concrete work	982	8 284	232 501	822 986	745 590	418 677	330 894	77 396	20 485	4	3
1781	Water well drilling	46	(D)	(D)	(D)	37 513	(D)	13 808	(D)	1 770	(D)	8
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	89	1 477	52 069	149 168	135 404	93 463	45 754	13 764	(D)	6	2
1793	Glass and glazing work	137	1 261	38 539	117 779	(D)	65 179	54 071	(D)	(D)	7	(D)
1794	Excavation work	307	2 253	77 123	256 189	230 239	169 562	65 319	25 949	12 499	5	4
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	125	3 654	128 006	350 305	(D)	228 889	105 022	(D)	(D)	2	(D)
1799	Special trade contractors, n.e.c.	665	7 331	195 110	559 828	487 901	336 559	155 766	71 927	5 050	9	6
	Gary, IN PMSA											
15,16,17	Construction industries	1 245	14 122	405 843	1 419 834	1 163 027	783 878	397 404	256 807	22 143	2	2
	(See appropriate State for SIC detail.)											
	Kankakee, IL PMSA											
15,16,17	Construction industries	(S)	1 854	58 314	220 555	175 810	123 380	56 394	44 745	5 023	8	5
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	*19	*27	*379	*1 510	*1 316	*670	*646	*194	(D)	43	52
1522	Other residential buildings	—	—	—	—	—	—	—	—	—	—	—
1531	Operative builders	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c.	*11	*155	*4 441	29 857	*11 766	*6 816	*4 961	18 090	(D)	56	47
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	4	250	7 452	24 321	21 264	16 329	8 548	3 057	792	(Z)	(Z)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	*10	(D)	(S)	(S)	(S)	(S)	(D)	(S)	2 587	(D)	(S)
1629	Heavy construction, n.e.c.	*9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

ILLINOIS IL–15

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work subcontracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHICAGO–GARY–KENOSHA, IL–IN–WI CMSA—Con.											
	Kankakee, IL PMSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	44	189	5 096	16 220	15 139	8 353	6 868	1 081	246	29	28
1721	Painting and paper hanging	*5	*32	*780	*1 428	*1 428	*1 124	*303	—	—	55	50
1731	Electrical work	(S)	115	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	(S)	(S)	(S)	(S)	(S)	*608	(S)	—	(S)	(S)
1742	Plastering, drywall, and insulation work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1743	Terrazzo, tile, marble, and mosaic work	—	—	—	—	—	—	—	—	—	—	—
175	Carpentry and floor work:											
1751	Carpentry	(S)	*25	*485	*1 313	*1 192	*753	*463	*120	(D)	68	71
1752	Floor laying and other floor work	—	—	—	—	—	—	—	—	—	—	—
1761	Roofing, siding, and sheet metal work	10	158	4 797	13 443	12 942	9 138	3 807	502	(D)	23	18
1771	Concrete work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(S)
1781	Water well drilling	—	—	—	—	—	—	—	—	—	—	—
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	(S)	(D)	(S)	(S)	(D)	(S)	—	(S)	(S)	(S)
1793	Glass and glazing work	1	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1794	Excavation work	(S)	70	2 829	(D)	(D)	7 319	1 967	581	(D)	32	(D)
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	(S)	55	1 782	6 163	(D)	4 364	1 794	(D)	(D)	14	(D)
	Kenosha, WI PMSA											
15,16, 17	Construction industries	290	2 124	62 443	264 688	188 720	114 359	79 533	75 969	3 002	3	2
	(See appropriate State for SIC detail.)											
	ST. LOUIS, MO–IL MSA											
15,16, 17	Construction industries	6 082	55 365	1 548 072	6 937 162	4 977 510	3 106 041	2 055 513	1 959 652	99 753	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 113	5 395	100 063	547 029	406 977	217 550	195 903	140 051	5 377	6	8
1522	Other residential buildings	(S)	463	11 296	(S)	(S)	(S)	(S)	(S)	(S)	28	(S)
1531	Operative builders	175	1 825	56 639	618 927	439 125	251 807	201 479	179 803	2 002	7	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	89	2 953	102 976	690 995	377 033	244 934	179 810	313 962	4 853	2	1
1542	Nonresidential buildings, n.e.c.	336	4 407	135 675	1 215 224	399 504	236 786	194 070	815 720	4 492	4	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	106	2 414	74 124	392 285	280 219	161 796	134 227	112 066	10 436	6	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	17	417	17 276	76 814	62 811	34 589	28 557	14 003	1 849	6	4
1623	Water, sewer, and utility lines	104	1 858	52 923	212 691	188 279	132 470	56 327	24 412	12 425	5	5
1629	Heavy construction, n.e.c.	159	2 487	82 619	351 757	286 491	187 106	116 320	65 266	15 566	4	3

IL–16 ILLINOIS

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	ST. LOUIS, MO-IL MSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	840	6 732	214 643	653 031	556 451	333 009	228 900	96 580	11 327	3	2
1721	Painting and paper hanging-----	449	2 425	60 781	146 028	143 220	104 480	38 788	2 808	2 551	5	4
1731	Electrical work -----	373	5 162	167 446	449 043	430 218	281 704	155 770	18 825	7 643	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	280	1 857	46 197	120 933	115 491	75 298	40 439	5 442	853	8	7
1742	Plastering, drywall, and insulation work -----	183	2 179	64 292	150 344	135 241	92 248	46 684	15 103	762	6	4
1743	Terrazzo, tile, marble, and mosaic work -----	52	299	6 988	22 027	(D)	13 714	8 306	(D)	33	24	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	378	2 141	49 587	167 291	143 471	100 895	46 046	(S)	1 990	9	12
1752	Floor laying and other floor work ---	(S)	1 160	27 118	92 397	90 965	45 174	47 431	(S)	1 071	13	14
1761	Roofing, siding, and sheet metal work -----	356	2 661	58 212	203 364	190 098	113 230	79 437	13 266	1 972	6	5
1771	Concrete work -----	(S)	2 978	72 139	221 714	206 387	121 185	85 669	15 327	5 452	5	4
1781	Water well drilling -----	13	178	4 483	14 766	14 545	8 226	6 400	221	811	15	18
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	43	1 024	37 073	149 533	130 566	93 299	37 267	18 967	998	8	5
1793	Glass and glazing work -----	31	190	5 788	22 235	22 163	11 483	11 287	(S)	198	15	21
1794	Excavation work -----	122	805	17 955	76 551	60 814	42 752	18 837	15 737	3 837	10	8
1795	Wrecking and demolition work -----	*19	149	2 910	18 084	(D)	9 035	1 607	(D)	272	18	(D)
1796	Installing building equipment, n.e.c. -	35	471	16 230	38 473	37 804	27 027	11 101	669	447	8	7
1799	Special trade contractors, n.e.c. ----	215	2 735	62 642	191 574	176 777	139 395	60 934	14 797	1 833	6	5

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Indiana. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 43,619 establishments in this State operating in the construction industries. These establishments accounted for \$12.9 billion in total dollar value of business done.

Most of the 43,619 construction establishments were small. Of the total, 30,495 were nonemployers, and over half of the employer establishments had less than 5 employees. The 5,587 construction establishments with 5 employees or more, while representing only 13 percent of all establishments, accounted for more than 83 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$12.1 billion in total dollar value of business done. Of this amount, \$11.9 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$2.5 billion, leaving net value of construction work of \$9.4 billion. In addition, these establishments paid out \$4.4 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$5.6 billion. (See Introduction and appendixes for explanation of terms.)

There were 13,124 establishments with total employment averaging 116,001 during the year. Total payroll for 1992 was \$2.9 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 30,495 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$790 million. Most of these establishments, about 81 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

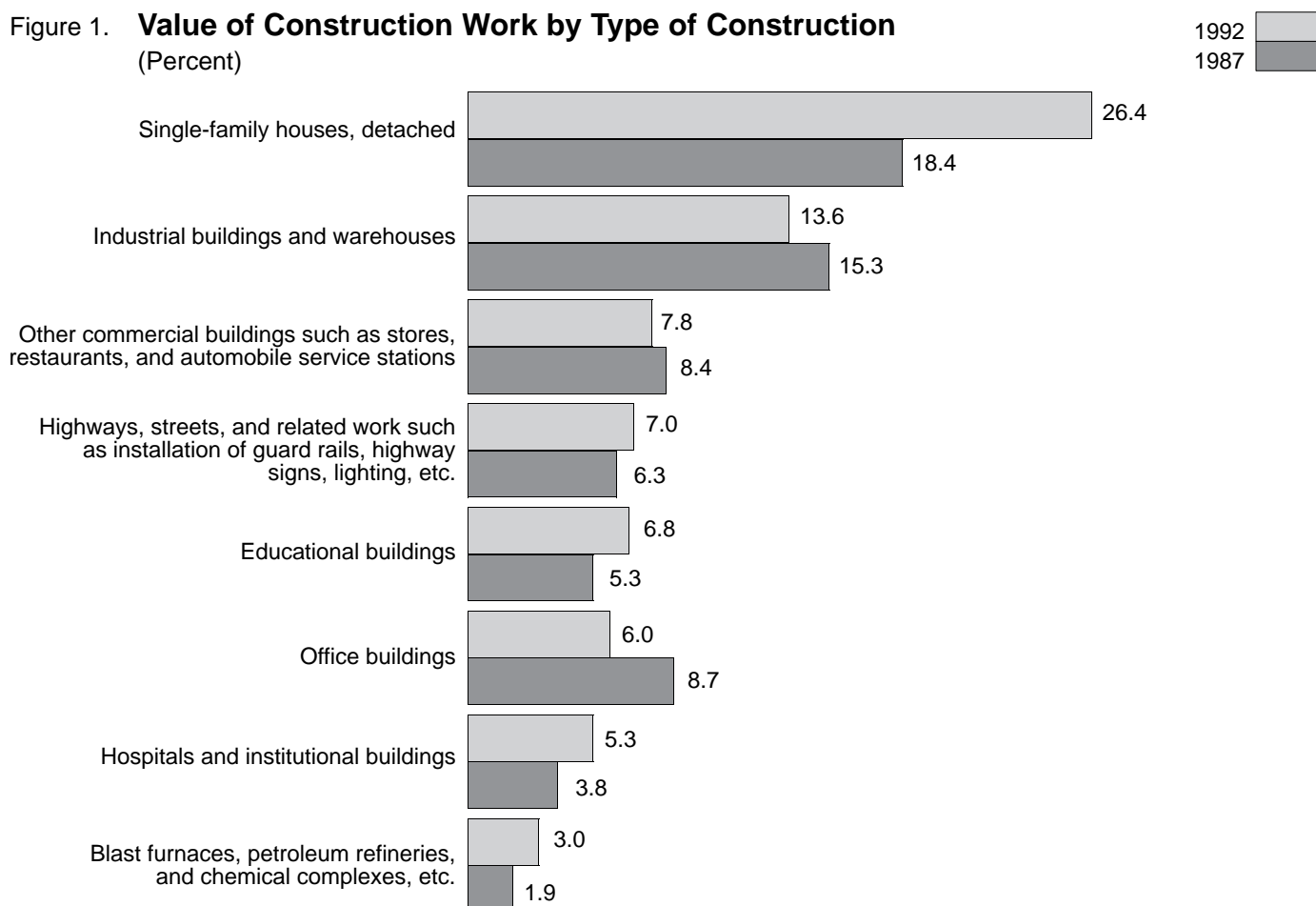


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

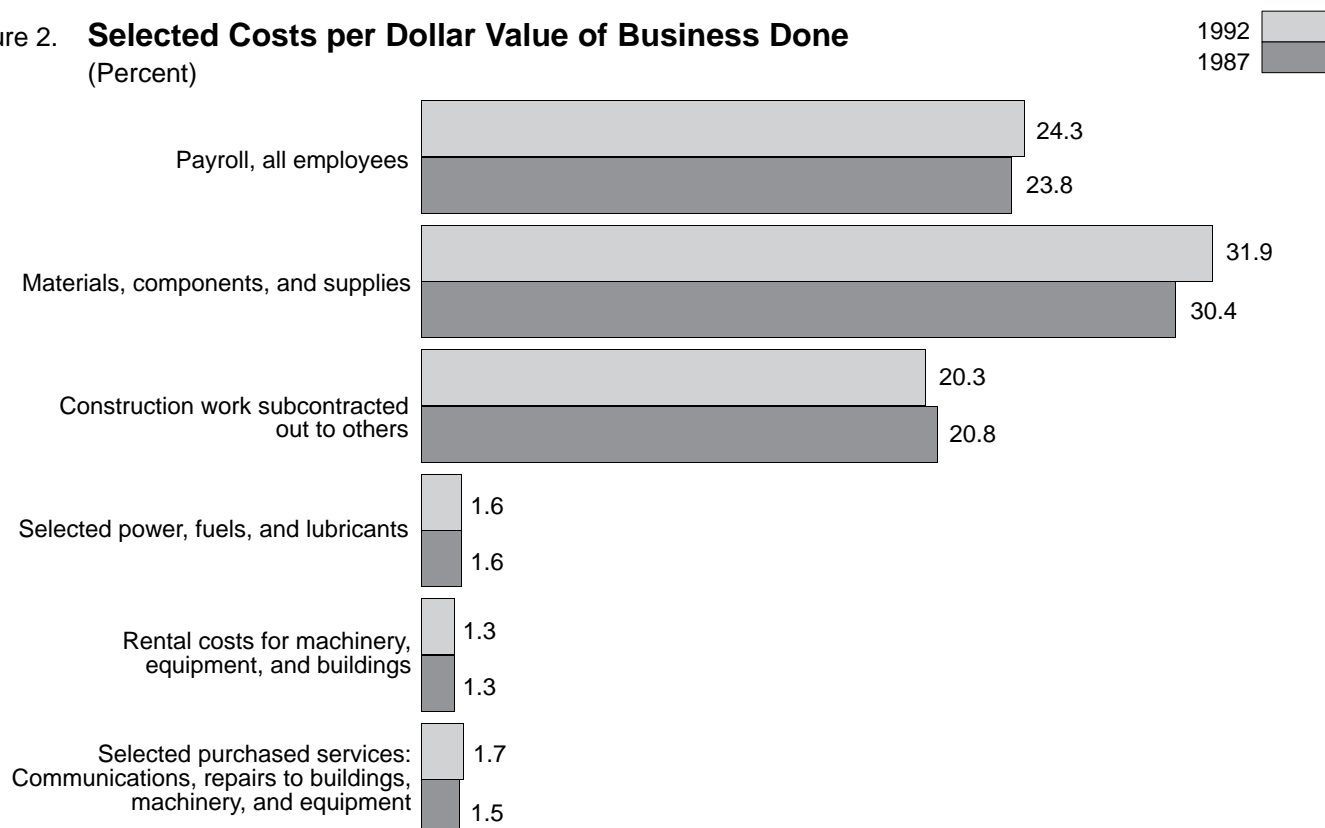


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	43 619	35 419	116 001	12 880 819	30 495	29 884	790 250	13 124	5 535	116 001	12 090 569	1	1
15	Building construction—General contractors and operative builders ----	9 371	6 615	28 887	4 984 135	5 244	4 846	307 999	4 127	1 769	28 887	4 676 136	1	2
16	Heavy construction other than building construction—contractors -----	1 313	710	18 579	2 241 274	458	438	12 739	855	272	18 579	2 228 535	1	1
17	Special trade contractors -----	32 935	28 094	68 535	5 655 409	24 793	24 600	469 512	8 142	3 494	68 535	5 185 897	1	1
1711	Plumbing, heating, and air-conditioning --	3 496	2 368	17 569	1 629 773	1 862	1 814	51 607	1 634	554	17 569	1 578 166	2	1
1731	Electrical work -----	2 720	1 846	11 724	952 778	1 667	1 612	28 143	1 053	234	11 724	924 635	2	1
	1987													
15, 16, 17	Construction industries² -----	42 346	33 748	98 408	10 373 798	31 373	30 604	1 257 428	10 973	3 144	98 408	9 116 370	1	1
15	Building construction—General contractors and operative builders ----	10 448	7 645	25 719	4 075 483	7 253	6 783	516 404	3 195	862	25 719	3 559 079	2	2
16	Heavy construction other than building construction—contractors -----	1 154	514	16 105	1 646 279	351	336	20 934	803	178	16 105	1 625 345	2	1
17	Special trade contractors -----	29 960	25 038	56 152	4 451 712	23 085	22 949	588 380	6 875	2 089	56 152	3 863 332	1	1
1711	Plumbing, heating, and air-conditioning --	3 408	2 318	14 755	1 294 453	1 895	1 848	72 860	1 513	470	14 755	1 221 593	2	1
1731	Electrical work -----	2 372	1 620	9 571	684 933	1 484	1 447	38 312	888	173	9 571	646 621	2	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹-----	13 124	116 001	90 667	2 939 817	2 156 197	11 888 023	9 428 757	5 582 888
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses-----	2 824	11 581	8 663	204 952	139 423	1 440 902	1 091 022	504 289
1522	Other residential buildings-----	236	1 083	743	19 862	13 074	127 589	75 569	47 013
1531	Operative builders-----	338	2 075	1 059	49 561	20 193	861 564	564 498	273 622
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses-----	206	3 643	2 816	104 449	74 142	505 678	297 308	165 888
1542	Nonresidential buildings, n.e.c.-----	522	10 506	8 031	297 456	204 775	1 669 682	894 109	556 466
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction-----	197	5 433	4 396	176 822	133 438	764 057	605 555	296 151
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction-----	32	2 252	1 852	92 367	72 229	354 663	288 560	136 836
1623	Water, sewer, and utility lines-----	211	6 207	5 107	177 226	125 224	545 463	492 343	342 353
1629	Heavy construction, n.e.c.-----	415	4 687	3 939	146 939	116 899	525 558	431 071	304 414
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning-----	1 634	17 569	13 060	507 684	371 705	1 553 176	1 375 942	840 535
1721	Painting and paper hanging-----	757	4 243	3 518	81 247	63 608	223 245	203 652	149 114
1731	Electrical work-----	1 053	11 724	9 211	320 473	240 942	903 341	862 095	535 416
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework-----	633	4 048	3 553	82 073	68 944	209 577	202 710	144 979
1742	Plastering, drywall, and insulation work-----	354	3 617	3 008	86 106	67 303	243 495	222 410	139 347
1743	Terrazzo, tile, marble, and mosaic work-----	64	603	503	13 031	9 826	36 273	34 951	19 964
175	Carpentry and floor work:								
1751	Carpentry-----	884	4 105	3 384	71 908	56 581	259 405	235 769	149 067
1752	Floor laying and other floor work-----	234	1 214	785	24 836	13 869	124 294	109 245	56 764
1761	Roofing, siding, and sheet metal work-----	641	6 072	4 806	138 419	100 601	463 784	434 589	252 985
1771	Concrete work-----	616	4 247	3 564	80 553	63 083	287 332	268 788	154 475
1781	Water well drilling-----	105	463	357	11 086	8 516	44 488	43 135	27 326
179	Miscellaneous special trade contractors:								
1791	Structural steel erection-----	91	1 605	1 345	44 870	37 041	106 029	99 602	75 218
1793	Glass and glazing work-----	85	695	445	17 319	10 387	58 166	57 258	29 528
1794	Excavation work-----	433	2 378	1 858	53 123	41 554	201 687	186 112	126 205
1795	Wrecking and demolition work-----	29	191	141	3 033	2 511	11 628	11 253	8 166
1796	Installing building equipment, n.e.c.-----	95	1 327	1 040	40 982	31 351	103 605	94 453	75 675
1799	Special trade contractors, n.e.c.-----	435	4 432	3 483	93 440	68 979	263 344	246 757	171 092

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
4 048 415	2 459 265	3 058 713	162 072	215 371	1 738 867	98 408	8 799 822	4 205 974	1	1	4	15, 16, 17
												15
607 199 30 430	349 880 52 020	37 864 (S)	8 740 (S)	15 269 *627	114 804 8 528	8 234 1 574	713 896 210 382	301 004 57 419	4 15	5 17	15 74	152 1521 1522
305 679	297 066	4 872	1 725	*9 336	29 873	2 320	585 018	157 470	8	8	72	1531
135 182 367 461	208 370 775 573	37 057 83 710	4 293 10 756	4 872 11 371	58 076 113 932	4 554 9 037	577 711 1 300 643	197 201 394 492	4 2	4 2	18 8	154 1541 1542
												16
329 793	158 502	159 992	22 870	38 978	226 577	4 973	569 333	286 203	3	2	2	1611
155 333 157 058 134 385	66 103 53 120 94 487	12 556 57 376 90 708	6 512 15 242 12 675	9 750 18 016 17 448	77 492 209 348 123 233	1 850 5 410 3 872	241 116 356 448 418 590	108 457 224 446 212 266	(Z) 3 3	(Z) 2 3	(Z) 4 9	162 1622 1623 1629
												17
560 397	177 234	756 831	31 535	20 082	175 378	14 755	1 201 123	632 928	2	1	9	1711
56 010	19 594	132 328	3 422	4 316	40 234	3 165	137 922	103 109	4	4	15	1721
347 973	41 246	409 320	9 216	10 195	99 928	9 571	637 738	402 616	2	1	7	1731
58 834 83 978 15 052	6 866 21 085 1 322	131 172 184 173 29 274	1 761 1 891 242	4 351 1 894 356	32 487 15 417 4 111	3 083 3 272 329	174 933 211 377 21 458	121 124 115 873 12 942	5 5 7	4 4 5	13 21 16	174 1741 1742 1743
90 571 61 003	23 635 15 049	150 188 74 769	1 977 1 683	4 609 *1 898	34 451 11 247	3 262 916	165 516 72 125	90 457 35 044	6 8	6 10	23 57	175 1751 1752
184 573	29 194	177 988	5 486	5 246	63 877	5 072	342 620	194 843	3	3	6	1761
116 980	18 544	168 577	3 456	7 264	76 682	3 715	233 190	131 763	5	3	18	1771
16 486	1 352	4 415	*178	(S)	*19 759	487	31 527	17 858	12	13	(S)	1781
31 780 31 931 62 096 3 799 22 203 82 228	6 428 908 15 574 *375 9 152 16 587	77 817 55 047 104 565 *2 088 18 535 94 105	4 031 977 5 529 *136 2 085 5 197	3 110 436 9 860 111 3 295 9 399	22 891 5 204 108 496 1 222 23 410 42 213	1 339 652 2 110 45 1 519 2 860	67 459 55 749 152 092 1 679 113 985 161 240	52 213 27 683 110 810 1 409 87 640 100 864	8 10 7 39 4 5	6 8 7 32 4 5	4 26 16 8 29 26	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	13 124	10 973	9 648	11 251	(Z)	1	2	2
Proprietors and working partners.....	5 535	3 144	3 695	6 868	2	4	4	4
All employees**	116 001	98 408	77 804	99 225	1	1	1	1
Construction workers:								
March.....	80 532	68 445	54 059	70 877	1	1	1	1
May	91 493	79 176	63 951	86 086	1	1	1	1
August	99 227	86 628	69 551	92 898	1	1	1	1
November.....	91 417	79 717	62 479	85 152	1	1	1	1
Average.....	90 667	78 492	63 456	83 818	1	1	1	1
Other employees:								
March.....	25 237	19 371	14 287	14 861	1	1	1	4
May	25 255	20 033	(NA)	(NA)	1	1	(NA)	(NA)
August	25 321	20 182	(NA)	(NA)	1	1	(NA)	(NA)
November.....	25 522	20 086	(NA)	(NA)	1	1	(NA)	(NA)
Average.....	25 334	19 918	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	2 939 817	2 169 441	1 467 103	1 327 493	(Z)	(Z)	1	1
Payroll, construction workers	2 156 197	1 608 886	1 159 938	1 083 223	(Z)	1	1	1
Payroll, other employees	783 620	560 554	307 165	244 270	1	1	1	3
First-quarter payroll, all employees	621 570	456 826	314 388	262 280	1	1	1	1
Fringe benefits, all employees	719 849	465 002	257 994	232 246	1	1	1	1
Legally required expenditures.....	431 378	292 911	189 426	124 440	1	1	1	1
Voluntary expenditures.....	288 471	172 090	68 568	107 806	1	1	1	(Z)
Dollar value of business done	12 090 569	9 116 370	5 037 326	4 904 613	1	1	1	1
Value of construction work	11 888 023	8 799 822	4 884 399	4 688 990	1	1	1	1
Value of construction work subcontracted in from others	3 058 713	1 927 804	957 344	892 496	2	2	1	1
Other business receipts	202 546	218 764	130 695	215 623	4	4	2	2
Net value of construction†	9 428 757	6 906 193	3 953 085	3 670 425	1	1	1	1
Value added††	5 582 888	4 205 974	2 470 522	2 157 956	1	1	1	1
Selected costs	6 507 681	4 812 612	2 544 571	2 658 742	1	1	1	1
Materials, components, and supplies	3 859 799	2 774 334	1 512 045	1 559 778	1	1	1	1
Construction work subcontracted out to others	2 459 265	1 893 628	931 313	1 018 566	2	2	1	1
Selected power, fuels, and lubricants	188 616	144 649	101 211	80 399	2	1	2	1
Electricity.....	29 554	22 217	14 880	10 075	3	2	3	3
Natural gas	11 508	7 852	7 560	5 688	2	2	3	5
Gasoline and diesel fuel	135 847	105 898	72 224	55 305	2	1	2	1
On highway use.....	101 508	73 874	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use.....	34 339	32 024	(NA)	(NA)	4	2	(NA)	(NA)
Other, including lubricating oils and greases.....	11 707	8 681	6 546	9 333	4	2	3	3
Rental cost for machinery, equipment, and buildings	162 072	118 318	55 992	54 706	2	2	2	1
For machinery and equipment	106 049	85 612	39 770	45 930	3	3	2	1
For buildings.....	56 023	32 706	16 222	8 776	3	3	3	2
Selected purchased services	202 485	140 482	84 896	84 338	2	2	2	5
Communication services	63 605	37 542	24 240	21 459	3	2	2	6
Repairs to buildings and other structures	11 432	9 236	6 636	5 361	6	7	3	4
Repairs to machinery and equipment	127 448	93 703	54 019	57 517	2	2	2	7
Ownership of construction projects:								
Value of construction work	11 888 023	8 799 822	4 884 399	4 688 990	1	1	1	1
Government owned	2 890 550	1 762 818	1 009 722	822 754	2	2	2	1
Federal	384 667	411 529	(NA)	(NA)	6	3	(NA)	(NA)
State and local	2 505 883	1 351 288	(NA)	(NA)	1	2	(NA)	(NA)
Privately owned	8 997 473	7 037 003	3 874 676	3 866 236	2	2	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 617 048	1 121 441	2	2
Capital expenditures, other than land -----	215 371	186 895	4	3
New -----	160 788	147 758	5	4
Used -----	54 583	39 137	5	5
Retirements and disposition of depreciable assets -----	93 552	60 701	8	3
End-of-year gross book value of depreciable assets -----	1 738 867	1 247 635	2	2
Depreciation charges during year -----	189 057	147 782	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	248 046	224 193	5	5
Capital expenditures, other than land -----	27 925	30 411	21	11
New buildings and other structures -----	21 375	22 766	26	14
Used buildings and other structures -----	6 549	7 644	27	14
Retirements and disposition of depreciable assets -----	16 067	13 084	33	9
End-of-year gross book value of depreciable assets -----	259 904	241 519	5	5
Depreciation charges during year -----	22 143	19 649	5	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 369 002	897 247	2	2
Capital expenditures, other than land -----	187 447	156 484	3	3
New machinery and equipment, including automobiles and trucks -----	139 413	124 991	3	3
New automobiles and trucks, intended primarily for highway use -----	46 329	51 211	4	6
Used machinery and equipment, including automobiles and trucks -----	48 034	31 492	4	5
Retirements and disposition of depreciable assets -----	77 486	47 616	6	3
End-of-year gross book value of depreciable assets -----	1 478 963	1 006 115	2	2
Depreciation charges during year -----	166 914	128 133	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	13 124	(Z)
Value of construction work	11 888 023	1
Establishments with inventories:		
Number	4 213	2
Value of construction work	5 783 967	1
Inventories ¹ :		
End of 1992, materials and supplies	158 555	5
End of 1991, materials and supplies	149 679	7
Establishments with no inventories:		
Number	4 843	2
Value of construction work	4 203 109	2
Establishments not reporting:		
Number	4 068	2
Value of construction work	1 900 947	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	13 124	7 537	3 055	1 490	715	192	110	15	9	1	
All employees** -----	116 001	14 660	19 199	19 655	21 188	12 911	16 153	5 167	7 066	(D)	
Payroll, all employees -----	2 939 817	231 282	362 358	448 809	581 642	397 200	506 288	163 359	248 879	(D)	
Dollar value of business done -----	12 090 569	1 456 357	1 671 674	1 733 574	2 340 783	1 608 374	1 906 122	586 234	787 450	(D)	
Value of construction work -----	11 888 023	1 428 014	1 652 816	1 705 602	2 303 353	1 571 356	1 864 768	582 871	779 243	(D)	
Net value of construction work† -----	9 428 757	1 151 148	1 348 546	1 424 957	1 814 101	1 201 258	1 375 941	465 459	647 347	(D)	
Value added†† -----	5 582 888	629 185	734 378	824 645	1 044 174	755 692	829 374	301 779	463 662	(D)	
Cost of materials, components, supplies, and fuels -----	4 048 415	550 307	633 026	628 285	807 357	482 584	587 921	167 043	191 892	(D)	
Cost of construction work subcontracted out to others -----	2 459 265	276 865	304 270	280 645	489 253	370 098	488 827	117 412	131 896	(D)	
Rental cost for machinery, equipment, and buildings -----	162 072	12 729	18 151	21 528	30 611	18 247	32 726	9 241	18 838	(D)	
Capital expenditures, other than land -----	215 371	20 961	38 195	26 723	48 421	36 150	27 346	4 171	13 405	(D)	
End-of-year gross book value of depreciable assets -----	1 738 867	181 762	251 521	263 259	391 575	229 004	245 047	37 915	138 784	(D)	
1987											
All employees** -----	98 408	12 865	14 994	16 992	21 331	12 633	9 945	4 446	5 199	(D)	
Value of construction work -----	8 799 822	1 103 285	994 570	1 387 194	1 955 546	1 288 204	1 050 242	1 020 779	(D)	(D)	
Value added†† -----	4 205 974	491 582	479 024	694 686	966 325	604 600	502 642	249 975	217 139	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	3	4	4	2	1	(Z)	(Z)	(Z)	(D)	
Net value of construction work† -----	1	4	5	4	1	(Z)	(Z)	(Z)	(Z)	(D)	
Capital expenditures, other than land -----	4	12	21	10	2	(Z)	(Z)	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	13 124	(S)	(S)	1 701	3 434	2 439	1 669	1 317	424	228	178
All employees** -----	116 001	(S)	(S)	3 018	10 952	13 110	14 177	19 463	13 440	11 071	28 930
Payroll, all employees -----	2 939 817	(S)	(S)	35 108	153 363	235 633	295 875	471 748	384 785	352 587	996 680
Dollar value of business done -----	12 090 569	(S)	(S)	123 588	550 703	858 290	1 166 186	1 940 757	1 479 412	1 520 772	4 400 099
Value of construction work -----	11 888 023	(S)	(S)	122 614	542 438	847 655	1 154 658	1 903 309	1 450 235	1 488 252	4 328 480
Net value of construction work† -----	9 428 757	(S)	(S)	115 151	500 090	765 962	998 629	1 584 050	1 179 190	1 118 746	3 119 549
Value added†† -----	5 582 888	(S)	(S)	72 267	299 188	452 517	569 638	912 498	705 921	613 856	1 928 151
Cost of materials, components, supplies, and fuels -----	4 048 415	(S)	(S)	43 859	209 167	324 080	440 519	709 000	502 446	537 410	1 263 017
Cost of construction work subcontracted out to others -----	2 459 265	(S)	(S)	(S)	42 348	81 693	156 029	319 259	271 045	369 505	1 208 930
Rental cost for machinery, equipment, and buildings -----	162 072	(S)	(S)	(S)	6 073	11 157	16 074	23 566	19 127	17 721	65 324
Capital expenditures, other than land -----	215 371	(S)	(S)	3 566	9 664	17 388	29 046	29 131	22 302	38 821	64 474
End-of-year gross book value of depreciable assets -----	1 738 867	(S)	(S)	22 812	101 244	144 658	193 670	314 987	217 444	230 893	500 858
1987											
All employees** -----	98 408	(S)	(S)	3 663	10 188	10 807	12 470	17 779	11 666	9 850	20 403
Value of construction work -----	8 799 822	(S)	(S)	133 473	477 060	596 442	844 585	1 566 334	1 238 470	1 146 012	2 756 775
Value added†† -----	4 205 974	(S)	(S)	76 385	274 617	317 424	426 244	774 263	610 246	548 440	1 153 264
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	7	5	5	4	3	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	6	4	5	5	4	3	3	(Z)
Capital expenditures, other than land -----	4	(S)	(S)	21	14	16	15	8	2	17	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

IN-10 INDIANA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	11 888 023	6 950 103	2 953 042	1 693 998	1	1	1	1
Building construction	8 787 124	5 512 258	2 217 274	1 057 592	1	2	1	2
Single-family houses	3 432 240	2 523 173	585 900	323 167	3	4	4	5
Single-family houses, detached	3 138 226	2 294 120	558 306	285 801	3	4	4	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	294 014	229 054	27 595	37 366	14	17	10	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	250 023	146 047	70 772	33 204	9	14	10	8
Other residential buildings, including hotels, motels, and tourist cabins	78 138	35 257	28 854	14 027	11	14	19	18
Office buildings	709 324	385 339	234 483	89 502	2	3	4	5
Other commercial buildings such as stores, restaurants, and automobile service stations	929 173	516 393	252 794	159 985	3	3	4	5
Industrial buildings and warehouses	1 614 610	876 846	446 296	291 468	1	2	2	3
Industrial buildings	1 375 031	708 779	395 490	270 762	1	2	2	3
Warehouses	239 579	168 067	50 806	20 706	5	5	10	9
Religious buildings	124 495	57 432	44 679	22 385	5	4	9	8
Educational buildings	804 161	473 163	278 674	52 323	1	2	2	5
Hospitals and institutional buildings	624 253	353 057	223 535	47 661	1	1	2	3
Amusement, social, and recreational buildings, indoors	91 743	66 371	19 464	5 908	2	2	4	16
Other nonresidential buildings	128 965	79 179	31 824	17 961	5	6	3	14
Nonbuilding construction	2 810 020	1 437 845	735 768	636 406	1	1	2	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	835 633	326 401	346 927	162 305	2	2	2	3
Private driveways and parking areas	78 000	32 628	29 319	16 053	9	9	15	17
Bridges, tunnels, and elevated highways	340 690	265 195	35 872	39 623	1	1	3	3
Tunnels	108 378	(D)	(D)	(D)	1	(D)	(D)	(D)
Bridges and elevated highways	232 312	(D)	(D)	(D)	1	(D)	(D)	(D)
Power and communication transmission lines, towers, and related facilities	249 116	110 451	62 904	75 761	3	5	2	4
Sewers, water mains, and related facilities	411 725	327 835	46 906	36 984	3	3	5	9
Sewers, sewer lines, septic systems, and related facilities	248 410	194 623	33 674	20 112	5	5	6	13
Water mains and related facilities	163 315	133 212	13 232	16 872	4	4	6	11
Pipeline construction other than sewer or water lines	62 391	26 486	3 926	31 979	1	1	3	(Z)
Mass transit construction	(S)	11 364	(S)	19 890	(S)	23	(S)	7
Blast furnaces, petroleum refineries, chemical complexes, etc.	358 667	126 527	65 751	166 389	1	1	(Z)	2
Power plants	108 286	16 030	41 112	51 145	1	4	(Z)	1
Sewage treatment and water treatment plants	107 508	75 104	22 205	10 199	10	14	2	3
Other nonbuilding construction	186 870	119 825	40 966	26 080	6	6	16	11
Construction work, n.s.k.	290 879	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1987								
Value of construction work	8 799 822	5 250 943	2 068 791	1 075 401	1	2	1	2
Building construction	6 349 911	4 139 413	1 500 303	710 195	1	2	2	2
Single-family houses	1 868 022	1 321 956	343 149	202 917	3	4	5	5
Single-family houses, detached	1 615 827	1 113 705	319 296	182 825	3	4	6	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	252 195	208 251	23 852	20 091	11	13	23	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	318 138	256 507	31 585	30 045	18	22	11	8
Other residential buildings, including hotels, motels, and tourist cabins	208 186	136 048	55 746	16 391	8	7	24	10
Office buildings	763 335	483 929	195 974	83 431	2	2	3	5
Other commercial buildings such as stores, restaurants, and automobile service stations	736 772	474 235	179 225	83 312	3	4	3	6
Industrial buildings and warehouses	1 350 085	825 154	338 819	186 110	1	2	2	3
Industrial buildings	1 130 807	656 658	303 129	171 019	2	2	3	3
Warehouses	219 277	168 496	35 690	15 091	2	2	5	6
Religious buildings	91 919	49 838	26 156	15 924	6	10	5	5
Educational buildings	467 272	268 657	165 041	33 573	2	3	2	3
Hospitals and institutional buildings	330 971	172 272	128 902	29 796	3	6	2	4
Amusement, social, and recreational buildings, indoors	101 187	84 792	5 263	11 132	5	2	18	32
Other nonresidential buildings	114 024	66 025	30 443	17 564	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	2 045 224	1 111 529	568 488	365 206	1	2	1	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	555 197	258 268	195 270	101 658	2	3	1	4
Private driveways and parking areas	78 611	48 566	15 879	14 166	9	11	8	15
Bridges, tunnels, and elevated highways	268 024	197 937	43 053	27 032	2	2	7	2
Tunnels	38 500	31 682	3 381	3 437	9	11	21	(Z)
Bridges and elevated highways	229 523	166 255	39 672	23 595	2	2	7	2
Power and communication transmission lines, towers, and related facilities	98 855	42 857	32 164	23 833	4	7	1	8
Sewers, water mains, and related facilities	265 423	207 390	29 773	28 259	4	4	8	17
Sewers, sewer lines, septic systems, and related facilities	177 190	141 312	21 300	14 576	4	4	8	16
Water mains and related facilities	88 233	66 078	8 472	13 682	7	8	14	19
Pipeline construction other than sewer or water lines	61 159	41 895	11 691	7 572	6	6	22	2
Blast furnaces, petroleum refineries, chemical complexes, etc.	169 018	58 240	49 371	61 406	4	4	4	7
Power plants	165 573	37 238	96 749	31 585	1	2	2	3
Sewage treatment and water treatment plants	108 476	60 952	41 232	6 292	4	3	7	29
Other nonbuilding construction	274 888	158 186	53 306	63 403	7	11	2	17
Construction work, n.s.k.	404 686	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	13 124	90 667	80 532	91 493	99 227	91 417	(Z)	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	2 824	8 663	7 936	8 897	9 449	8 368	3	4	4	4	4	4
1522	Other residential buildings -----	236	743	664	679	818	810	15	17	17	17	18	19
1531	Operative builders -----	338	1 059	926	1 084	1 161	1 063	10	11	12	11	10	11
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	206	2 816	2 587	2 770	3 073	2 834	12	4	3	4	4	4
1542	Nonresidential buildings, n.e.c. -----	522	8 031	7 168	7 933	8 852	8 171	7	2	3	2	2	2
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	197	4 396	2 497	4 990	5 566	4 533	11	3	4	3	3	4
162	Heavy construction, except highway: Bridge, tunnel, and elevated												
1622	highway construction -----	32	1 852	1 731	1 961	2 049	1 668	5	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	211	5 107	4 420	5 306	5 256	5 447	11	3	2	2	3	3
1629	Heavy construction, n.e.c. -----	415	3 939	3 566	4 051	3 882	4 255	9	3	3	3	3	3
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 634	13 060	12 346	12 944	13 841	13 108	3	2	2	2	2	2
1721	Painting and paper hanging -----	757	3 518	2 937	3 712	4 069	3 354	4	4	5	5	5	5
1731	Electrical work -----	1 053	9 211	8 958	8 782	9 738	9 364	2	2	1	2	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	633	3 553	2 982	3 699	3 915	3 617	4	5	5	5	5	6
1742	Plastering, drywall, and insulation work -----	354	3 008	2 933	3 012	3 186	2 901	7	4	5	4	5	4
1743	Terrazzo, tile, marble, and mosaic work -----	64	503	468	497	564	481	10	6	5	5	7	7
175	Carpentry and floor work:												
1751	Carpentry -----	884	3 384	3 039	3 349	3 724	3 426	5	6	6	6	6	7
1752	Floor laying and other floor work -----	234	785	750	773	872	744	6	9	9	10	9	9
1761	Roofing, siding, and sheet metal work -----	641	4 806	4 241	4 877	5 346	4 762	5	3	4	3	3	3
1771	Concrete work -----	616	3 564	2 561	3 706	4 223	3 768	4	5	6	5	5	6
1781	Water well drilling -----	105	357	338	345	384	360	8	13	15	14	13	13
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	91	1 345	1 206	1 247	1 573	1 356	14	8	8	7	10	7
1793	Glass and glazing work -----	85	445	419	424	487	449	11	8	8	7	9	10
1794	Excavation work -----	433	1 858	1 534	1 887	2 080	1 929	8	7	7	7	7	8
1795	Wrecking and demolition work -----	29	141	140	160	134	129	29	32	35	25	31	38
1796	Installing building equipment, n.e.c. -----	95	1 040	1 030	1 038	1 052	1 041	15	4	3	5	6	4
1799	Special trade contractors, n.e.c. -----	435	3 483	3 154	3 368	3 930	3 482	8	4	4	5	6	4

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.8	25.3	131.1	.247	.341	.207	.257	.014
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.1	17.7	166.3	.142	.421	.243	.026	.006
1522	Other residential buildings -----	4.6	18.3	171.7	.156	.238	.408	(S)	(S)
1531	Operative builders -----	6.1	23.9	813.6	.058	.355	.345	.006	.002
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	17.7	28.7	179.6	.207	.267	.412	.073	.008
1542	Nonresidential buildings, n.e.c. -----	20.1	28.3	207.9	.178	.220	.465	.050	.006
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	27.6	32.5	173.8	.231	.432	.207	.209	.030
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	70.7	41.0	191.5	.260	.438	.186	.035	.018
1623	Water, sewer, and utility lines -----	29.4	28.6	106.8	.325	.288	.097	.105	.028
1629	Heavy construction, n.e.c. -----	11.3	31.4	133.4	.280	.256	.180	.173	.024
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	10.8	28.9	118.9	.327	.361	.114	.487	.020
1721	Painting and paper hanging -----	5.6	19.1	63.5	.364	.251	.088	.593	.015
1731	Electrical work -----	11.1	27.3	98.1	.355	.385	.046	.453	.010
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6.4	20.3	59.0	.392	.281	.033	.626	.008
1742	Plastering, drywall, and insulation work -----	10.2	23.8	80.9	.354	.345	.087	.756	.008
1743	Terrazzo, tile, marble, and mosaic work -----	9.5	21.6	72.1	.359	.415	.036	.807	.007
175	Carpentry and floor work:								
1751	Carpentry -----	4.6	17.5	76.7	.277	.349	.091	.579	.008
1752	Floor laying and other floor work -----	5.2	20.5	158.3	.200	.491	.121	.602	.014
1761	Roofing, siding, and sheet metal work -----	9.5	22.8	96.5	.298	.398	.063	.384	.012
1771	Concrete work -----	6.9	19.0	80.6	.280	.407	.065	.587	.012
1781	Water well drilling -----	4.4	23.9	124.6	.249	.371	.030	*.099	*.004
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	17.7	28.0	78.8	.423	.300	.061	.734	.038
1793	Glass and glazing work -----	8.2	24.9	130.7	.298	.549	.016	.946	.017
1794	Excavation work -----	5.5	22.3	108.6	.263	.308	.077	.518	.027
1795	Wrecking and demolition work -----	6.6	15.9	82.5	.261	.327	*.032	.180	.012
1796	Installing building equipment, n.e.c. -----	13.9	30.9	99.6	.396	.214	.088	.179	.020
1799	Special trade contractors, n.e.c. -----	10.2	21.1	75.6	.355	.312	.063	.357	.020

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work subcontracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHICAGO–GARY–KENOSHA, IL–IN–WI CMSA											
15,16,17	Construction industries	17 461	168 121	5 399 233	22 184 439	16 162 846	10 365 237	6 228 715	6 021 593	279 047	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	2 885	11 080	233 167	1 376 443	983 916	527 016	491 491	392 527	12 220	4	4
1522	Other residential buildings	243	1 227	33 414	237 423	116 365	73 322	43 972	121 059	1 346	10	9
1531	Operative builders	548	5 255	184 956	2 318 036	1 243 261	803 724	478 592	1 074 775	9 348	5	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	234	3 719	137 975	904 972	414 983	257 419	187 174	489 989	6 576	5	3
1542	Nonresidential buildings, n.e.c.	856	12 245	444 751	3 659 631	1 234 914	792 052	543 363	2 424 717	21 504	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	201	5 458	221 418	1 017 241	780 051	478 541	349 073	237 189	25 837	2	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	30	1 974	86 144	374 933	273 385	189 102	84 397	101 548	6 403	4	12
1623	Water, sewer, and utility lines	239	4 256	170 523	590 859	506 731	336 813	181 403	84 128	19 833	3	2
1629	Heavy construction, n.e.c.	(S)	7 450	269 993	1 088 583	843 673	664 918	244 021	244 910	21 311	1	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	2 446	25 623	867 194	2 657 598	2 406 530	1 506 359	924 498	251 067	29 898	2	2
1721	Painting and paper hanging	996	5 830	161 165	375 898	343 850	263 365	82 935	32 048	6 311	4	3
1731	Electrical work	1 723	19 593	727 771	1 992 008	1 885 342	1 200 925	691 395	106 666	21 936	1	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	816	6 484	184 849	484 270	464 542	311 663	154 936	19 728	7 013	3	4
1742	Plastering, drywall, and insulation work	506	6 676	208 099	564 077	518 750	339 914	180 603	45 328	5 270	3	4
1743	Terrazzo, tile, marble, and mosaic work	157	1 237	35 821	104 163	(D)	61 701	37 746	(D)	695	5	(D)
175	Carpentry and floor work:											
1751	Carpentry	1 357	9 556	259 590	761 948	698 659	420 608	284 683	63 288	10 802	3	3
1752	Floor laying and other floor work	395	2 687	77 301	262 710	244 966	137 171	110 431	17 744	5 292	6	4
1761	Roofing, siding, and sheet metal work	946	8 807	261 216	842 191	768 463	467 465	307 554	73 728	12 749	3	4
1771	Concrete work	1 095	8 991	244 995	868 094	788 541	441 503	351 094	79 553	21 069	3	3
1781	Water well drilling	54	421	13 407	39 793	(D)	24 851	14 483	(D)	1 904	9	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	102	1 833	64 863	177 653	161 900	112 839	53 591	15 753	2 714	6	2
1793	Glass and glazing work	151	1 372	41 712	126 986	122 562	70 719	59 204	4 424	850	6	4
1794	Excavation work	351	2 531	85 334	285 719	257 998	189 803	73 018	27 721	14 145	5	4
1795	Wrecking and demolition work	(S)	1 529	32 845	89 343	(D)	70 086	23 211	(D)	3 295	3	(D)
1796	Installing building equipment, n.e.c.	131	3 704	129 286	353 616	333 078	230 855	105 977	20 538	3 408	2	1
1799	Special trade contractors, n.e.c.	730	8 584	221 445	630 249	554 850	392 504	169 869	75 399	7 318	8	5
	Chicago, IL PMSA											
15,16,17	Construction industries	15 745	150 021	4 872 634	20 279 362	14 635 290	9 343 621	5 695 384	5 644 072	248 879	1	1
	(See appropriate State for SIC detail.)											
	Gary, IN PMSA											
15,16,17	Construction industries	1 245	14 122	405 843	1 419 834	1 163 027	783 878	397 404	256 807	22 143	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	242	965	19 155	129 484	103 319	52 627	51 967	26 165	1 830	12	15
1522	Other residential buildings	24	113	*1 526	*9 375	(D)	3 248	*2 668	(D)	—	38	(D)
1531	Operative builders	43	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c.	43	798	24 103	96 658	59 929	43 334	16 840	36 729	705	5	5

IN-14 INDIANA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHICAGO–GARY–KENOSHA, IL–IN–WI CMSA—Con.											
	Gary, IN PMSA—Con.											
15,16, 17	Construction industries—Con.											
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	20	323	12 980	70 237	50 281	32 495	17 959	19 956	982	13	19
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	2	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	8	141	(D)	(D)	(D)	(D)	3 204	(D)	(D)	(Z)	(D)
1629	Heavy construction, n.e.c. -----	28	1 995	(D)	(D)	(D)	(D)	(D)	(D)	5 074	2	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	174	2 470	84 115	220 483	199 049	138 389	63 377	21 434	1 925	3	3
1721	Painting and paper hanging-----	69	641	19 526	(D)	(D)	30 346	12 176	(D)	2 161	6	(D)
1731	Electrical work -----	(S)	1 686	49 996	140 661	134 673	87 849	47 549	5 988	1 238	6	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	(S)	314	10 100	31 782	30 412	22 866	7 589	(S)	(D)	16	12
1742	Plastering, drywall, and insulation work -----	30	268	7 386	17 759	17 194	(D)	6 438	(S)	(D)	13	13
1743	Terrazzo, tile, marble, and mosaic work -----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	121	568	10 606	47 902	39 887	24 508	15 758	*8 015	(S)	20	20
1752	Floor laying and other floor work ---	36	(D)	(D)	11 459	10 515	5 490	(D)	944	(D)	(D)	13
1761	Roofing, siding, and sheet metal work -----	72	721	16 753	55 518	52 735	30 806	22 063	2 783	349	10	8
1771	Concrete work -----	71	515	8 878	31 512	30 595	16 036	14 611	917	386	16	6
1781	Water well drilling -----	(S)	(D)	(D)	(D)	(D)	(S)	(D)	—	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	8	302	(D)	27 515	25 526	(D)	7 767	1 989	(D)	(Z)	(Z)
1793	Glass and glazing work -----	8	(D)	(D)	(D)	(D)	4 460	4 009	(D)	(D)	(D)	(D)
1794	Excavation work-----	30	175	4 410	(D)	(D)	10 481	4 634	(S)	1 130	8	(D)
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -	(S)	(S)	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(S)	(D)
1799	Special trade contractors, n.e.c.-----	47	1 187	24 286	63 307	59 881	51 000	11 968	3 426	2 185	7	9
	Kankakee, IL PMSA											
15,16, 17	Construction industries -----	(S)	1 854	58 314	220 555	175 810	123 380	56 394	44 745	5 023	8	5
	(See appropriate State for SIC detail.)											
	Kenosha, WI PMSA											
15,16, 17	Construction industries -----	290	2 124	62 443	264 688	188 720	114 359	79 533	75 969	3 002	3	2
	(See appropriate State for SIC detail.)											
	CINCINNATI–HAMILTON, OH–KY–IN CMSA											
15,16, 17	Construction industries -----	4 374	40 410	1 016 316	4 615 778	3 394 346	1 905 131	1 571 074	1 221 432	70 455	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	674	2 936	52 646	473 452	342 687	161 758	183 863	130 766	2 798	6	8
1522	Other residential buildings -----	15	261	5 372	31 117	19 902	11 301	9 188	11 215	(D)	2	(Z)
1531	Operative builders -----	195	1 719	60 376	731 815	410 518	176 046	267 361	321 298	5 112	6	9
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	62	1 428	39 777	174 437	105 439	66 765	42 301	68 998	977	6	6
1542	Nonresidential buildings, n.e.c. -----	221	3 042	83 095	681 498	250 959	104 022	155 167	430 539	11 618	5	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	62	2 068	61 443	313 630	249 276	147 296	105 262	64 355	9 978	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	50	1 557	40 080	129 522	112 725	76 632	38 414	16 797	5 991	2	2
1629	Heavy construction, n.e.c. -----	50	1 006	31 507	116 217	103 463	68 354	36 554	12 755	3 056	3	2

CONSTRUCTION—GEOGRAPHIC AREA SERIES

INDIANA IN–15

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CINCINNATI-HAMILTON, OH-KY-IN CMSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	612	5 896	160 380	537 601	475 109	275 699	205 522	62 492	7 404	2	2
1721	Painting and paper hanging	272	1 318	23 343	60 597	57 864	42 903	15 424	2 733	546	10	7
1731	Electrical work	380	3 818	101 957	277 207	264 496	161 367	107 060	12 711	2 578	3	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	201	1 308	25 703	61 585	59 417	42 161	17 406	2 168	1 259	9	8
1742	Plastering, drywall, and insulation work	147	1 681	36 583	103 490	95 216	58 173	37 328	8 275	1 131	7	5
1743	Terrazzo, tile, marble, and mosaic work	54	323	6 761	19 843	(D)	11 503	7 933	(D)	(D)	18	(D)
175	Carpentry and floor work:											
1751	Carpentry	389	1 816	34 603	108 984	94 033	59 790	36 472	14 951	790	8	9
1752	Floor laying and other floor work	64	558	12 793	51 616	47 484	23 749	25 022	4 133	657	4	1
1761	Roofing, siding, and sheet metal work	218	1 649	37 422	121 358	113 220	68 132	47 091	8 138	1 583	6	4
1771	Concrete work	245	3 228	84 879	270 597	242 803	115 021	129 839	27 794	6 081	4	3
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	36	480	13 526	31 725	30 273	24 611	5 674	(S)	674	5	5
1793	Glass and glazing work	53	380	9 113	38 143	34 481	15 041	19 610	3 661	985	14	8
1794	Excavation work	132	766	16 284	59 281	54 713	41 297	13 919	4 568	2 847	9	9
1795	Wrecking and demolition work	9	106	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c.	35	1 216	32 911	78 533	75 957	58 024	18 641	2 576	1 050	2	3
1799	Special trade contractors, n.e.c.	190	1 823	42 053	129 232	120 921	84 306	43 079	8 312	2 293	7	7
	Cincinnati, OH-KY-IN PMSA											
15,16,17	Construction industries	3 644	33 505	827 482	3 806 813	2 743 906	1 550 055	1 267 287	1 062 907	59 338	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	581	2 666	46 772	416 785	300 528	143 587	159 844	116 257	2 385	7	9
1522	Other residential buildings	11	(D)	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1531	Operative builders	157	1 471	54 014	567 594	306 784	132 531	207 138	260 810	4 795	6	8
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	53	1 277	34 054	146 688	90 218	56 523	36 313	56 470	(D)	6	7
1542	Nonresidential buildings, n.e.c.	197	2 838	76 223	646 252	228 961	88 049	36 313 (D)	417 290	11 371	6	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	50	1 722	50 765	267 174	212 764	121 614	93 277	54 411	8 099	5	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	38	1 217	32 035	98 430	(D)	58 445	30 941	(D)	4 837	3	(D)
1629	Heavy construction, n.e.c.	39	888	(D)	105 821	95 212	62 453	34 204	10 610	2 819	3	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	495	5 163	142 171	477 194	420 558	243 122	182 199	56 636	6 915	3	2
1721	Painting and paper hanging	240	1 147	19 624	50 904	48 380	35 726	13 116	2 524	440	12	8
1731	Electrical work	308	3 292	87 203	238 246	226 139	138 839	90 175	12 107	2 435	3	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	173	1 051	20 198	48 495	(D)	33 224	13 398	(D)	1 046	11	(D)
1742	Plastering, drywall, and insulation work	111	1 264	29 359	80 309	74 785	46 736	28 203	5 525	585	7	5
1743	Terrazzo, tile, marble, and mosaic work	43	260	5 605	(D)	16 576	(D)	6 759	(D)	(D)	15	14
175	Carpentry and floor work:											
1751	Carpentry	334	1 579	30 880	96 520	83 195	53 278	32 138	13 325	626	8	10
1752	Floor laying and other floor work	53	492	12 025	49 022	(D)	22 208	23 772	(D)	569	6	(D)
1761	Roofing, siding, and sheet metal work	185	1 432	31 933	102 335	94 224	58 339	37 854	8 111	1 458	7	5
1771	Concrete work	196	1 625	(D)	(D)	(D)	59 706	(D)	(D)	(D)	8	(D)

IN-16 INDIANA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.											
	Cincinnati, OH—KY—IN PMSA—Con.											
15,16,17	Construction industries—Con.											
1781	Special trade contractors—Con.											
	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	29	278	7 581	19 178	17 940	15 233	(S)	(S)	(D)	9	8
1793	Glass and glazing work	44	338	8 076	35 226	31 596	13 510	18 257	3 630	(D)	14	7
1794	Excavation work	108	615	12 608	47 903	43 866	33 120	11 168	4 037	2 109	11	11
1795	Wrecking and demolition work	9	106	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c.	31	(D)	(D)	(D)	(D)	(D)	17 421	(D)	1 047	(D)	(D)
1799	Special trade contractors, n.e.c.	156	1 537	35 576	106 670	100 420	67 595	38 135	6 250	(D)	7	8
	Hamilton—Middletown, OH PMSA											
15,16,17	Construction industries	729	6 905	188 834	808 964	650 440	355 076	303 787	158 524	11 117	2	5
	(See appropriate State for SIC detail.)											
	INDIANAPOLIS, IN MSA											
15,16,17	Construction industries	3 519	37 349	961 491	4 200 995	3 227 731	1 870 117	1 425 913	973 263	56 951	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	588	2 612	52 998	391 603	281 257	138 373	147 862	110 345	3 550	7	8
1522	Other residential buildings	70	345	6 625	50 324	29 415	17 378	13 455	*20 909	(D)	28	29
1531	Operative builders	153	1 029	27 957	555 912	370 023	180 877	192 430	185 889	1 084	8	10
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	33	455	13 999	94 173	51 000	24 412	26 688	43 173	(S)	12	10
1542	Nonresidential buildings, n.e.c.	176	3 581	100 748	702 488	326 454	201 492	130 787	376 034	2 658	4	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	32	1 006	35 186	151 530	118 256	43 256	85 809	33 274	10 032	5	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	8	212	6 135	23 463	19 136	11 838	10 241	4 327	1 136	(Z)	(Z)
1623	Water, sewer, and utility lines	53	1 272	40 309	114 712	106 069	69 860	37 035	8 643	4 688	6	5
1629	Heavy construction, n.e.c.	(S)	836	22 337	92 291	77 017	42 867	34 459	15 274	2 421	9	5
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	382	6 041	183 728	555 024	484 357	287 765	207 752	70 667	5 312	3	2
1721	Painting and paper hanging	252	1 565	28 649	80 213	73 657	52 066	21 636	6 555	(S)	7	6
1731	Electrical work	273	4 714	128 198	368 357	348 673	214 426	142 643	19 684	4 522	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	188	1 332	27 738	67 640	64 704	44 802	20 248	2 936	1 618	7	6
1742	Plastering, drywall, and insulation work	117	1 900	44 526	124 501	111 454	71 590	40 050	13 047	1 025	7	5
1743	Terrazzo, tile, marble, and mosaic work	17	381	7 842	21 051	20 226	11 308	8 976	825	126	3	2
175	Carpentry and floor work:											
1751	Carpentry	273	1 598	30 459	96 600	90 602	59 145	33 589	5 999	1 543	9	8
1752	Floor laying and other floor work	82	623	14 570	85 150	73 008	34 577	45 416	12 142	361	9	14
1761	Roofing, siding, and sheet metal work	176	2 381	56 181	195 034	184 838	114 255	72 639	10 196	2 100	5	4
1771	Concrete work	167	1 571	33 368	120 317	108 399	62 654	47 049	11 918	3 119	8	6
1781	Water well drilling	13	51	1 138	(D)	(D)	3 267	(D)	(D)	86	14	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	21	394	9 485	26 225	24 180	17 441	6 791	*2 045	504	24	21
1793	Glass and glazing work	38	383	9 469	32 851	32 539	16 172	17 229	311	(S)	15	11
1794	Excavation work	134	757	19 513	79 605	73 915	45 794	28 481	5 690	4 172	10	10
1795	Wrecking and demolition work	(S)	(S)	(S)	(D)	(D)	(S)	(D)	(D)	(D)	(S)	(D)
1796	Installing building equipment, n.e.c.	54	516	18 011	48 064	41 521	33 422	9 679	6 543	2 016	10	9
1799	Special trade contractors, n.e.c.	(S)	1 788	42 218	117 911	111 172	70 819	42 638	6 739	3 760	7	8

CONSTRUCTION—GEOGRAPHIC AREA SERIES

INDIANA IN—17

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	LOUISVILLE, KY-IN MSA											
15,16,17	Construction industries	2 343	21 880	496 002	2 209 423	1 679 422	963 308	753 480	530 000	37 680	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	391	1 403	22 336	227 300	146 027	68 092	80 852	81 273	1 204	10	12
1522	Other residential buildings	25	175	4 127	19 822	13 737	8 449	5 289	6 085	(D)	28	16
1531	Operative builders	64	579	11 814	171 883	111 891	65 968	47 462	59 992	623	23	16
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	47	600	15 211	88 465	41 042	24 802	16 524	47 423	940	13	11
1542	Nonresidential buildings, n.e.c.	118	1 817	47 648	348 984	154 578	82 820	74 266	194 406	(D)	6	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	26	655	19 648	105 773	85 482	51 987	35 370	(S)	2 097	10	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	8	252	7 580	49 474	(D)	15 172	21 112	(D)	957	(Z)	(D)
1623	Water, sewer, and utility lines	33	777	19 261	75 107	63 154	36 842	27 921	11 952	3 010	2	1
1629	Heavy construction, n.e.c.	34	554	12 605	58 445	49 967	32 140	18 166	8 479	3 285	7	8
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	340	3 840	92 913	315 755	280 913	144 926	141 072	34 842	4 010	3	3
1721	Painting and paper hanging	168	856	13 901	51 775	41 792	27 752	14 419	9 983	629	11	8
1731	Electrical work	157	2 311	63 044	168 119	164 622	99 122	68 062	3 498	2 030	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	109	1 019	21 003	58 574	55 622	37 256	18 369	(S)	809	4	2
1742	Plastering, drywall, and insulation work	71	1 151	23 450	65 773	61 716	43 229	20 912	4 057	662	7	8
1743	Terrazzo, tile, marble, and mosaic work	19	170	4 815	13 783	13 718	8 130	5 597	65	150	10	6
175	Carpentry and floor work:											
1751	Carpentry	(S)	727	13 086	45 855	41 949	27 029	17 096	3 906	820	8	8
1752	Floor laying and other floor work	61	420	7 286	30 717	29 571	15 407	14 196	1 147	876	18	22
1761	Roofing, siding, and sheet metal work	148	1 438	29 994	98 643	89 545	53 421	40 886	9 098	915	8	7
1771	Concrete work	140	1 110	20 599	71 319	61 347	34 247	27 251	9 972	1 132	7	6
1781	Water well drilling	4	17	387	(D)	1 024	699	422	(D)	(D)	(Z)	(Z)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	13	265	7 446	15 932	13 980	14 159	4 845	1 952	(D)	11	7
1793	Glass and glazing work	11	186	4 576	14 437	14 338	7 793	6 875	99	108	(Z)	(Z)
1794	Excavation work	59	298	5 495	18 495	16 981	13 637	4 146	1 514	1 374	17	16
1795	Wrecking and demolition work	11	80	1 631	(D)	6 410	3 994	2 482	(D)	128	20	33
1796	Installing building equipment, n.e.c.	25	596	13 873	47 043	(D)	19 373	26 286	(D)	339	3	(D)
1799	Special trade contractors, n.e.c.	85	585	12 274	40 027	39 084	26 862	13 602	(S)	3 125	13	16

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Michigan. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 66,190 establishments in this State operating in the construction industries. These establishments accounted for \$17.9 billion in total dollar value of business done.

Most of the 66,190 million construction establishments were small. Of the total, 45,744 million were nonemployers, and over half of the employer establishments had less than 5 employees. The 7,491 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 78 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$16.4 billion in total dollar value of business done. Of this amount, \$16.0 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$4.0 billion, leaving net value of construction work of \$12.0 billion. In addition, these establishments paid out \$5.8 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$7.1 billion. (See Introduction and appendixes for explanation of terms.)

There were 20,446 establishments with total employment averaging 141,595 during the year. Total payroll for 1992 was \$3.7 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 45,744 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$1.5 billion. Most of these establishments, about 80 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

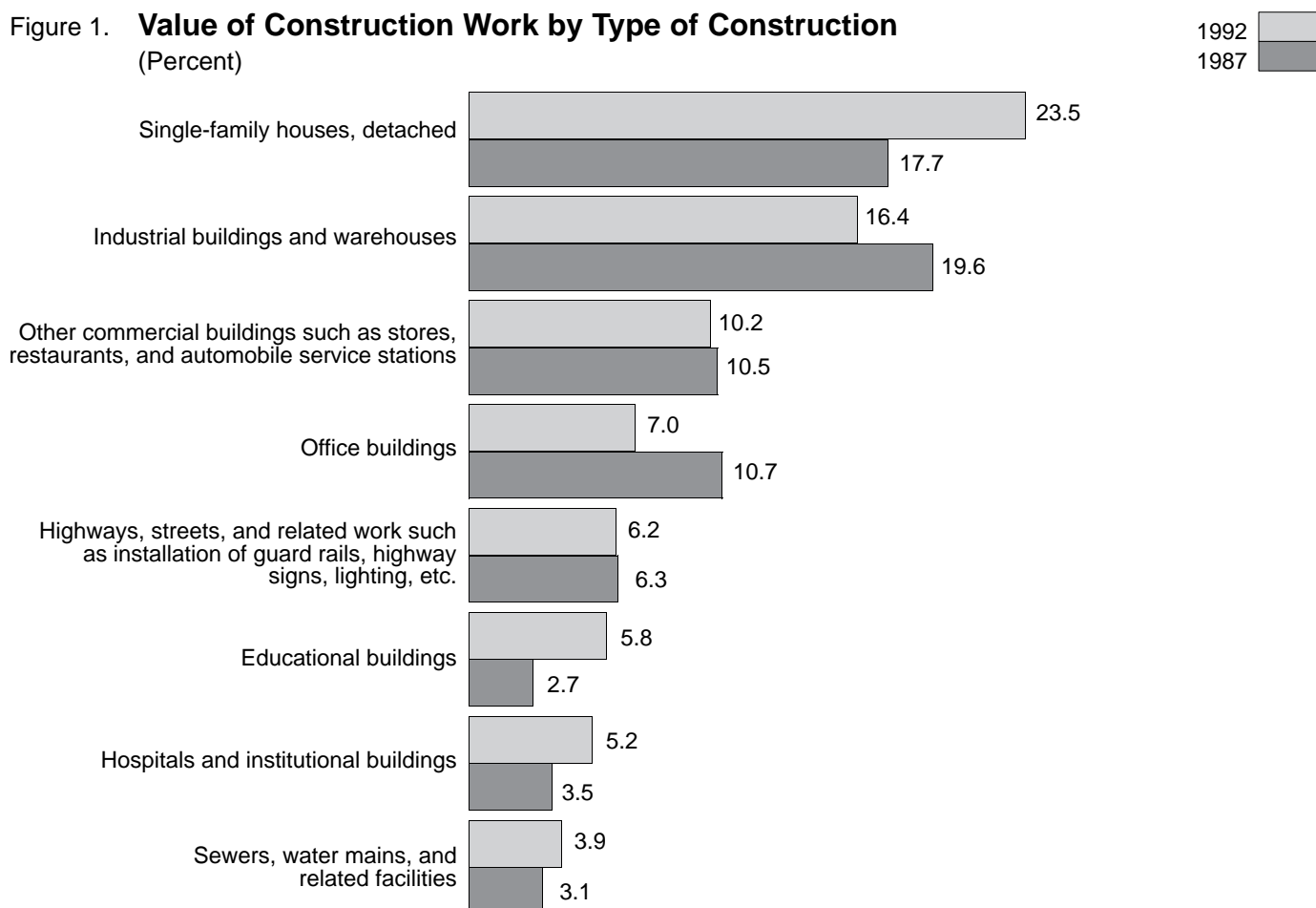


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

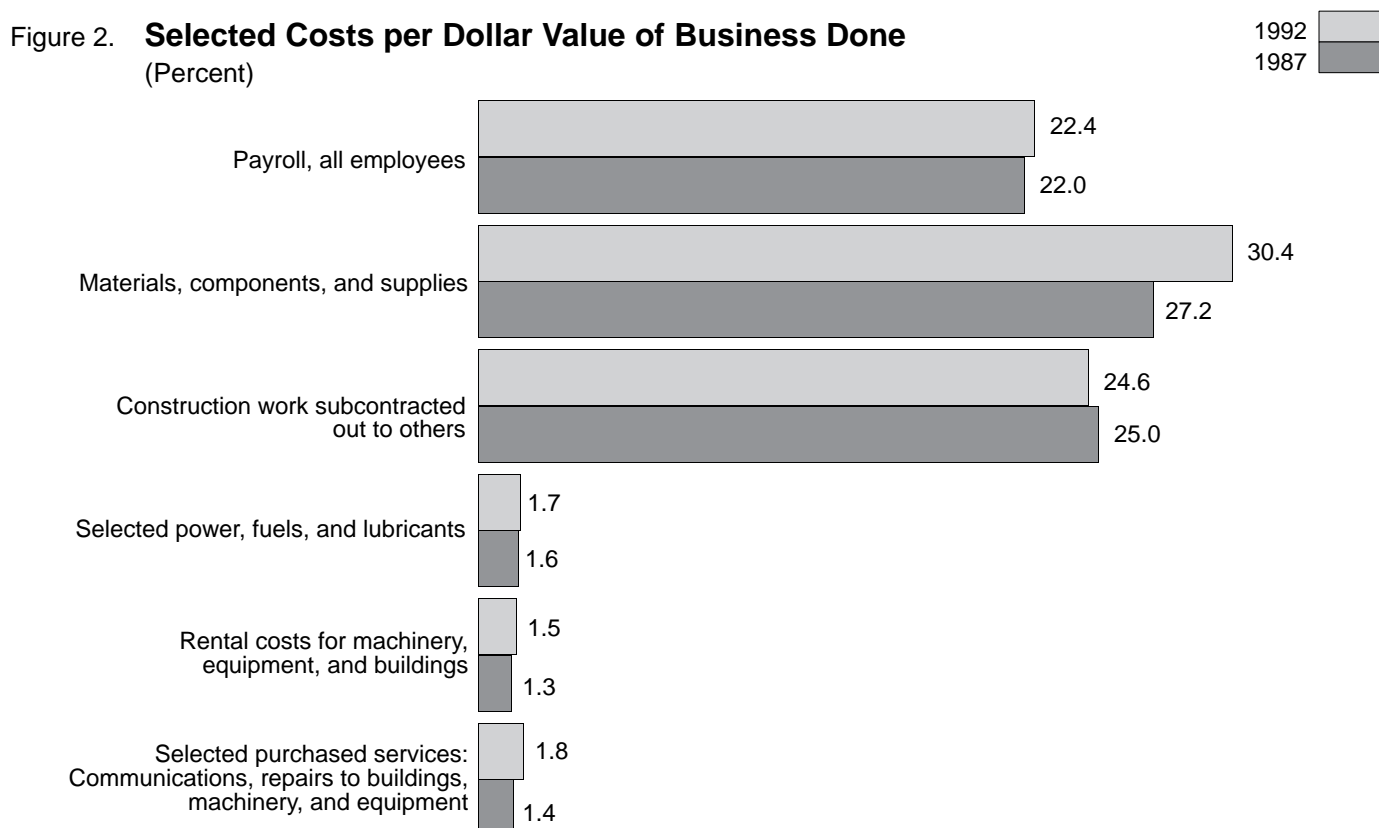


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	66 190	51 590	141 595	17 853 253	45 744	44 115	1 457 456	20 446	7 475	141 595	16 395 797	1	1
15	Building construction—General contractors and operative builders ----	14 823	10 060	33 463	6 905 622	8 680	7 670	604 963	6 143	2 390	33 463	6 300 659	2	2
16	Heavy construction other than building construction—contractors -----	1 718	730	16 457	2 237 771	549	489	18 194	1 169	241	16 457	2 219 577	2	1
17	Special trade contractors -----	49 649	40 800	91 676	8 709 861	36 515	35 956	834 299	13 134	4 844	91 676	7 875 562	1	1
1711	Plumbing, heating, and air-conditioning --	5 549	3 533	19 464	2 100 498	2 908	2 781	92 285	2 641	752	19 464	2 008 213	2	1
1731	Electrical work -----	4 431	3 022	16 327	1 440 840	2 591	2 467	52 621	1 840	555	16 327	1 388 219	2	1
	1987													
15, 16, 17	Construction industries² -----	61 599	48 072	140 085	17 255 267	44 553	43 773	2 042 889	17 046	4 299	140 085	15 212 378	1	1
15	Building construction—General contractors and operative builders ----	14 326	10 066	33 107	6 627 818	9 620	8 912	742 396	4 706	1 154	33 107	5 885 422	1	2
16	Heavy construction other than building construction—contractors -----	1 467	518	16 676	2 084 690	426	382	22 290	1 041	136	16 676	2 062 400	2	1
17	Special trade contractors -----	44 803	36 483	89 813	8 217 190	33 621	33 495	1 023 365	11 182	2 988	89 813	7 193 825	1	1
1711	Plumbing, heating, and air-conditioning --	5 087	3 281	19 591	1 924 368	2 812	2 757	128 491	2 275	524	19 591	1 795 877	2	1
1731	Electrical work -----	3 917	2 643	15 096	1 320 624	2 349	2 298	74 565	1 568	345	15 096	1 246 059	2	1

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	20 446	141 595	107 740	3 666 125	2 600 447	16 048 438	12 018 699	7 109 697
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4 331	15 815	11 684	283 703	192 895	1 724 596	1 221 174	611 570
1522	Other residential buildings -----	197	1 342	924	27 306	16 854	195 818	120 280	65 905
1531	Operative builders -----	515	2 290	972	78 257	22 733	805 423	496 069	279 384
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	293	3 830	2 798	115 764	73 350	850 305	413 525	249 387
1542	Nonresidential buildings, n.e.c. -----	808	10 186	6 853	315 543	185 798	2 564 043	998 785	464 168
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	309	6 279	5 168	196 185	157 227	971 986	770 751	429 296
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	29	607	495	21 689	16 379	108 551	75 805	42 002
1623	Water, sewer, and utility lines -----	363	6 034	4 954	197 119	146 809	739 506	641 658	413 037
1629	Heavy construction, n.e.c. -----	468	3 537	2 844	95 566	72 749	356 851	300 768	208 293
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	2 641	19 464	14 150	566 541	397 611	1 966 036	1 715 611	1 016 885
1721	Painting and paper hanging -----	926	4 507	3 668	91 685	71 233	263 413	244 661	175 093
1731	Electrical work -----	1 840	16 327	12 394	504 834	370 821	1 374 604	1 315 622	857 420
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	882	4 818	4 302	107 334	90 444	338 039	320 493	207 187
1742	Plastering, drywall, and insulation work -----	592	4 684	3 881	109 857	83 875	355 881	302 056	184 438
1743	Terrazzo, tile, marble, and mosaic work -----	141	636	499	15 748	11 738	47 702	45 906	25 752
175	Carpentry and floor work:								
1751	Carpentry -----	1 628	7 760	6 226	149 838	113 404	564 889	490 858	299 510
1752	Floor laying and other floor work -----	266	1 214	907	29 678	20 124	126 796	111 445	54 133
1761	Roofing, siding, and sheet metal work -----	872	7 150	5 509	163 009	114 689	581 409	539 923	295 295
1771	Concrete work -----	1 159	7 126	5 699	164 427	124 410	638 084	579 033	333 438
1781	Water well drilling -----	268	1 218	932	24 866	18 654	103 098	101 724	60 667
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	160	2 301	1 816	68 703	52 120	241 336	210 932	137 441
1793	Glass and glazing work -----	143	969	628	25 501	16 337	89 809	84 441	44 240
1794	Excavation work -----	619	3 142	2 491	82 808	64 356	296 862	264 466	187 604
1795	Wrecking and demolition work -----	55	682	530	21 935	14 518	90 706	76 410	63 137
1796	Installing building equipment, n.e.c. -----	160	4 017	3 236	82 270	61 784	248 497	222 685	171 430
1799	Special trade contractors, n.e.c. -----	783	5 660	4 179	125 960	89 535	404 196	353 618	232 986

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
5 256 361	4 029 739	4 655 280	238 464	274 924	2 558 404	140 085	14 654 738	6 915 232	1	1	3	15, 16, 17
												15
638 441	503 423	67 088	12 646	21 609	143 010	12 298	1 211 838	441 816	3	4	11	152
56 686	75 538	*28 660	1 393	830	7 516	1 802	213 441	74 627	11	12	35	1521
250 329	309 354	15 713	6 187	3 677	38 150	2 244	732 842	194 030	7	8	13	1531
183 649	436 779	90 892	8 816	4 387	68 134	5 925	1 140 377	352 453	8	5	10	154
610 787	1 565 259	105 312	16 634	19 192	163 034	10 838	2 216 361	578 151	3	3	8	1541
												1542
												16
368 623	201 236	219 077	29 901	33 372	412 711	5 636	859 953	423 737	3	2	4	1611
34 130	32 746	15 509	1 164	3 606	32 015	675	112 063	39 162	5	2	6	162
236 517	97 848	145 705	23 959	36 881	326 045	4 811	505 274	282 096	3	3	12	1622
99 766	56 083	70 612	16 739	18 031	138 228	5 554	539 054	331 087	5	4	11	1623
												1629
												17
740 903	250 425	961 007	25 745	27 278	226 209	19 591	1 772 975	945 744	2	1	10	1711
72 096	18 751	129 824	5 178	3 833	44 825	5 662	304 613	202 149	5	5	13	1721
471 817	58 982	774 119	18 755	24 073	177 334	15 096	1 228 011	785 131	2	1	7	1731
115 848	17 546	231 904	4 369	5 478	59 742	4 290	265 692	177 002	4	5	13	174
122 091	53 825	258 325	4 257	2 356	30 206	4 741	337 596	182 489	4	3	12	1741
20 317	1 796	28 643	342	*1 058	5 706	798	58 700	34 610	11	9	73	1742
												1743
198 797	74 032	257 088	5 725	4 802	38 987	6 736	404 709	221 256	4	4	18	175
59 206	15 351	80 319	2 016	1 464	10 219	1 018	88 361	45 616	8	5	10	1751
246 716	41 486	219 476	6 958	11 703	97 085	7 623	608 683	333 035	4	5	17	1752
262 397	59 051	338 297	11 748	14 949	164 034	6 748	582 253	332 759	3	3	10	1761
41 153	1 374	15 807	1 270	2 764	49 303	778	66 649	34 167	10	7	21	1771
												1781
77 635	30 404	122 313	4 193	3 076	30 691	2 262	219 687	143 815	4	7	21	179
48 336	5 368	62 581	1 649	821	10 429	1 324	119 227	65 421	7	5	26	1791
90 674	32 396	150 593	11 178	17 198	164 898	3 391	312 220	210 336	5	6	19	1793
14 590	14 296	40 987	5 077	1 714	21 337	654	81 751	67 723	4	5	12	1794
62 587	25 812	61 902	5 032	2 150	42 930	2 933	263 255	170 459	3	2	5	1795
132 270	50 577	163 530	7 534	8 621	55 625	6 168	361 966	223 339	4	4	12	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	20 446	17 046	13 953	16 354	(Z)	1	1	2
Proprietors and working partners.....	7 475	4 299	4 491	9 199	2	4	3	3
All employees**	141 595	140 085	105 675	128 198	1	1	1	1
Construction workers:								
March.....	88 548	92 489	70 197	83 053	1	1	1	1
May	110 000	112 039	85 322	112 002	1	1	1	1
August	122 867	123 768	92 442	122 138	1	1	1	1
November.....	109 543	113 518	82 881	112 054	1	1	1	1
Average.....	107 740	110 453	84 331	107 420	1	1	1	1
Other employees:								
March.....	32 812	28 228	20 995	19 408	1	1	1	1
May	33 562	29 549	(NA)	(NA)	1	1	(NA)	(NA)
August	34 553	30 525	(NA)	(NA)	1	1	(NA)	(NA)
November.....	34 495	30 233	(NA)	(NA)	1	1	(NA)	(NA)
Average.....	33 856	29 634	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	3 666 125	3 340 818	2 178 928	1 923 025	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	2 600 447	2 425 766	1 663 174	1 537 235	(Z)	(Z)	1	(Z)
Payroll, other employees	1 065 678	915 051	515 754	385 791	1	1	1	1
First-quarter payroll, all employees	725 628	698 897	480 970	353 183	1	1	1	(Z)
Fringe benefits, all employees	1 013 444	846 861	366 886	407 629	1	1	1	(Z)
Legally required expenditures.....	620 839	546 615	277 744	218 863	1	1	1	1
Voluntary expenditures.....	392 605	300 246	89 142	188 766	1	1	1	(Z)
Dollar value of business done	16 395 797	15 212 378	9 301 645	7 759 714	1	1	(Z)	1
Value of construction work	16 048 438	14 654 738	8 991 253	7 549 535	1	1	(Z)	1
Value of construction work subcontracted in from others	4 655 280	3 934 452	1 794 525	1 852 362	2	1	1	1
Other business receipts	347 360	437 070	293 619	210 179	4	2	1	2
Net value of construction†	12 018 699	10 851 030	6 174 978	5 608 217	1	1	1	1
Value added††	7 109 697	6 915 232	4 182 301	3 378 784	1	1	1	1
Selected costs	9 286 100	8 176 576	5 102 570	4 326 389	1	1	1	1
Materials, components, and supplies	4 979 743	4 132 394	2 115 457	2 248 550	1	1	1	1
Construction work subcontracted out to others	4 029 739	3 803 707	2 816 275	1 941 319	1	2	1	1
Selected power, fuels, and lubricants	276 618	240 474	170 838	136 520	1	1	1	1
Electricity.....	42 959	27 627	20 067	14 087	2	1	2	2
Natural gas	20 301	15 508	13 091	11 199	2	2	2	2
Gasoline and diesel fuel	199 197	179 932	124 833	94 459	1	1	1	1
On highway use.....	144 304	126 771	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use.....	54 893	53 160	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases.....	14 161	17 406	12 845	16 779	3	2	2	2
Rental cost for machinery, equipment, and buildings	238 464	194 796	108 006	100 294	2	2	1	1
For machinery and equipment	147 452	131 884	77 430	79 995	3	3	1	1
For buildings.....	91 012	62 912	30 575	20 299	3	2	2	1
Selected purchased services	293 043	216 568	122 675	127 338	2	1	1	1
Communication services	88 345	62 719	36 716	31 237	3	2	2	1
Repairs to buildings and other structures	17 801	13 755	8 296	7 288	6	3	2	3
Repairs to machinery and equipment	186 896	140 093	77 662	88 813	2	2	2	1
Ownership of construction projects:								
Value of construction work	16 048 438	14 654 738	8 991 253	7 549 535	1	1	(Z)	1
Government owned	3 336 922	2 318 567	1 501 923	1 427 024	3	3	2	1
Federal	392 447	549 367	(NA)	(NA)	5	3	(NA)	(NA)
State and local	2 944 475	1 769 199	(NA)	(NA)	2	3	(NA)	(NA)
Privately owned	12 711 516	12 336 171	7 489 329	6 122 511	1	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	2 391 965	1 646 876	2	2
Capital expenditures, other than land -----	274 924	278 704	3	2
New -----	202 833	228 858	3	2
Used -----	72 091	49 846	6	5
Retirements and disposition of depreciable assets -----	108 485	76 400	3	6
End-of-year gross book value of depreciable assets -----	2 558 404	1 849 180	2	2
Depreciation charges during year -----	278 151	221 619	2	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	276 580	292 925	5	5
Capital expenditures, other than land -----	18 171	34 895	8	9
New buildings and other structures -----	12 696	27 912	9	10
Used buildings and other structures -----	5 475	6 983	19	10
Retirements and disposition of depreciable assets -----	5 500	10 908	11	21
End-of-year gross book value of depreciable assets -----	289 251	316 913	4	5
Depreciation charges during year -----	24 390	32 271	5	14
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	2 115 385	1 353 951	2	2
Capital expenditures, other than land -----	256 753	243 808	3	2
New machinery and equipment, including automobiles and trucks -----	190 137	200 945	3	2
New automobiles and trucks, intended primarily for highway use -----	77 188	88 866	6	3
Used machinery and equipment, including automobiles and trucks -----	66 616	42 863	6	6
Retirements and disposition of depreciable assets -----	102 985	65 492	4	5
End-of-year gross book value of depreciable assets -----	2 269 153	1 532 267	2	2
Depreciation charges during year -----	253 761	189 348	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	20 446	(Z)
Value of construction work	16 048 438	1
Establishments with inventories:		
Number	6 826	2
Value of construction work	7 189 023	1
Inventories ¹ :		
End of 1992, materials and supplies	260 797	5
End of 1991, materials and supplies	235 357	5
Establishments with no inventories:		
Number	7 131	2
Value of construction work	5 629 051	1
Establishments not reporting:		
Number	6 489	2
Value of construction work	3 230 365	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	20 446	12 956	4 182	2 027	941	236	88	12	5	—	
All employees** -----	141 595	25 907	26 736	26 479	27 259	15 519	12 489	3 897	3 309	—	
Payroll, all employees -----	3 666 125	453 622	556 937	675 285	845 950	513 472	412 287	115 236	93 337	—	
Dollar value of business done -----	16 395 797	2 557 885	2 565 714	2 778 553	3 580 153	2 113 623	1 705 485	409 685	684 700	—	
Value of construction work -----	16 048 438	2 518 026	2 515 805	2 719 349	3 475 229	2 056 513	1 673 848	405 267	684 400	—	
Net value of construction work† -----	12 018 699	2 036 212	1 992 519	2 140 000	2 622 693	1 466 285	1 106 319	<u>654 671</u>	(D)	—	
Value added†† -----	7 109 697	1 132 548	1 148 875	1 258 098	1 611 567	935 117	732 432	<u>291 059</u>	(D)	—	
Cost of materials, components, supplies, and fuels -----	5 256 361	943 522	893 553	941 106	1 116 049	588 277	405 524	<u>107 128</u>	261 202	—	
Cost of construction work subcontracted out to others -----	4 029 739	481 814	523 286	579 349	852 537	590 228	567 529	<u>434 996</u>	(D)	—	
Rental cost for machinery, equipment, and buildings -----	238 464	29 305	40 464	44 248	61 592	28 836	24 672	<u>4 981</u>	4 366	—	
Capital expenditures, other than land -----	274 924	49 280	44 256	47 471	63 022	33 307	27 776	<u>9 811</u>	(D)	—	
End-of-year gross book value of depreciable assets -----	2 558 404	415 230	358 008	430 420	588 275	324 477	322 314	<u>119 679</u>	(D)	—	
1987											
All employees** -----	140 085	20 392	24 915	26 550	29 313	16 476	13 445	5 346	<u>3 644</u>	(D)	
Value of construction work -----	14 654 738	1 943 208	2 120 489	2 565 322	3 251 336	2 136 597	1 609 550	<u>1 028 234</u>	(D)	(D)	
Value added†† -----	6 915 232	832 440	1 013 910	1 218 404	1 596 022	957 069	805 696	<u>364 448</u>	<u>127 241</u>	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	2	3	3	2	(Z)	(Z)	(Z)	(Z)	—	
Net value of construction work† -----	1	3	4	3	1	(Z)	(Z)	(Z)	(D)	—	
Capital expenditures, other than land -----	3	9	10	8	2	(Z)	(Z)	(Z)	(D)	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics		Establishments with dollar value of business done—									
		Total	Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	$10,000,000 or more
1992											
Number of establishments -----	20 446	(S)	(S)	2 702	5 915	3 682	2 684	1 727	676	310	210
All employees** -----	141 595	(S)	(S)	4 734	17 127	18 222	20 956	24 840	17 248	13 765	22 374
Payroll, all employees -----	3 666 125	(S)	(S)	56 513	256 605	334 943	465 343	661 027	537 217	478 518	854 225
Dollar value of business done -----	16 395 797	(S)	(S)	199 295	967 757	1 283 400	1 875 006	2 627 009	2 355 608	2 105 842	4 912 165
Value of construction work -----	16 048 438	(S)	(S)	198 162	956 452	1 274 259	1 827 785	2 573 223	2 297 466	2 055 230	4 796 643
Net value of construction work† -----	12 018 699	(S)	(S)	184 355	877 958	1 149 118	1 555 495	2 104 280	1 757 703	1 537 613	2 787 629
Value added†† -----	7 109 697	(S)	(S)	110 831	520 944	657 760	911 063	1 276 568	1 040 847	913 696	1 638 929
Cost of materials, components, supplies, and fuels -----	5 256 361	(S)	(S)	74 657	368 320	500 499	691 652	881 499	774 999	674 529	1 264 222
Cost of construction work subcontracted out to others -----	4 029 739	(S)	(S)	(S)	78 494	125 141	272 290	468 943	539 763	517 617	2 009 013
Rental cost for machinery, equipment, and buildings -----	238 464	(S)	(S)	3 350	11 800	18 585	37 176	42 508	31 440	35 740	57 269
Capital expenditures, other than land -----	274 924	(S)	(S)	(S)	21 412	28 087	41 851	44 982	35 152	37 919	59 606
End-of-year gross book value of depreciable assets -----	2 558 404	(S)	(S)	(S)	177 182	225 495	358 028	405 166	329 348	332 520	677 980
1987											
All employees** -----	140 085	(S)	(S)	(S)	15 358	15 848	19 129	25 103	17 345	16 306	24 077
Value of construction work -----	14 654 738	(S)	(S)	(S)	780 541	1 006 904	1 564 362	2 438 455	2 125 621	2 284 389	4 222 289
Value added†† -----	6 915 232	(S)	(S)	(S)	435 458	552 815	783 139	1 245 194	1 007 249	1 051 277	1 705 652
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	6	4	4	4	3	1	1	(Z)
Net value of construction work† -----	1	(S)	(S)	5	3	4	4	3	3	2	(Z)
Capital expenditures, other than land -----	3	(S)	(S)	(S)	11	12	12	7	4	4	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

MI-10 MICHIGAN

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	16 048 438	9 019 682	4 342 310	2 133 596	1	1	1	2
Building construction	12 514 641	7 414 072	3 494 867	1 605 702	1	1	1	2
Single-family houses	4 204 601	2 764 723	946 314	493 564	2	3	4	4
Single-family houses, detached	3 768 935	2 455 886	888 975	424 075	2	3	4	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	435 666	308 837	57 339	69 489	6	7	11	8
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	432 241	295 504	69 631	67 106	6	7	10	6
Other residential buildings, including hotels, motels, and tourist cabins	114 528	54 048	43 854	16 627	4	6	4	9
Office buildings	1 127 338	689 139	297 610	140 590	2	2	4	3
Other commercial buildings such as stores, restaurants, and automobile service stations	1 638 468	875 342	518 059	245 066	2	2	3	4
Industrial buildings and warehouses	2 631 992	1 445 187	780 427	406 378	1	2	2	3
Industrial buildings	2 347 764	1 262 977	719 374	365 413	1	2	2	3
Warehouses	284 228	182 210	61 053	40 965	5	7	6	10
Religious buildings	305 195	185 919	83 468	35 808	4	3	14	7
Educational buildings	934 412	484 299	351 450	98 662	2	2	4	8
Hospitals and institutional buildings	836 585	444 321	328 768	63 496	1	2	2	7
Amusement, social, and recreational buildings, indoors	85 287	46 787	28 029	10 471	8	12	5	37
Other nonresidential buildings	203 993	128 804	47 256	27 933	5	6	6	14
Nonbuilding construction	2 980 948	1 605 610	847 444	527 894	1	2	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	995 886	373 092	433 773	189 021	1	2	2	2
Private driveways and parking areas	172 681	82 442	51 794	38 446	8	9	9	11
Bridges, tunnels, and elevated highways	138 563	71 522	44 014	23 027	2	(Z)	(Z)	12
Power and communication transmission lines, towers, and related facilities	251 781	145 793	49 046	56 942	5	8	7	4
Sewers, water mains, and related facilities	630 265	489 325	92 177	48 763	4	4	11	9
Sewers, sewer lines, septic systems, and related facilities	399 144	317 032	55 137	26 975	4	4	5	14
Water mains and related facilities	231 121	172 293	37 040	21 788	6	5	25	12
Pipeline construction other than sewer or water lines	95 238	65 834	20 369	9 036	4	3	9	11
Blast furnaces, petroleum refineries, chemical complexes, etc.	128 432	54 300	41 324	32 808	3	2	4	7
Power plants	101 818	35 962	16 012	49 844	2	(Z)	3	3
Sewage treatment and water treatment plants	137 740	96 148	25 105	16 487	4	4	11	7
Other nonbuilding construction	328 544	191 193	73 830	63 521	5	6	3	10
Construction work, n.s.k.	552 849	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1987								
Value of construction work	14 654 738	8 969 264	3 404 909	1 658 941	1	1	1	1
Building construction	11 273 020	7 393 548	2 650 290	1 229 183	1	1	2	2
Single-family houses	3 039 231	2 105 908	615 798	317 524	3	4	5	4
Single-family houses, detached	2 591 221	1 736 085	568 944	286 192	3	4	5	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	448 010	369 823	46 854	31 332	9	11	10	10
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	472 589	354 269	56 044	62 275	4	5	8	7
Other residential buildings, including hotels, motels, and tourist cabins	345 017	257 556	53 586	33 875	3	4	7	7
Office buildings	1 569 254	1 133 933	279 581	155 739	2	3	3	3
Other commercial buildings such as stores, restaurants, and automobile service stations	1 533 940	934 483	417 882	181 574	2	2	3	3
Industrial buildings and warehouses	2 876 196	1 805 341	749 882	320 972	1	1	3	2
Industrial buildings	2 567 392	1 569 346	701 427	296 618	1	2	3	2
Warehouses	308 803	235 995	48 454	24 353	4	5	5	5
Religious buildings	151 586	77 263	48 105	26 216	4	6	5	4
Educational buildings	399 859	166 931	177 328	55 600	4	3	7	6
Hospitals and institutional buildings	507 465	287 509	175 615	44 340	2	2	2	4
Amusement, social, and recreational buildings, indoors	175 650	150 325	17 916	7 408	1	1	4	8
Other nonresidential buildings	202 233	120 030	58 553	23 660	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	2 760 095	1 575 717	754 619	429 759	1	2	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	926 238	371 462	413 596	141 179	2	4	2	5
Private driveways and parking areas	123 043	55 868	35 546	31 627	8	10	8	15
Bridges, tunnels, and elevated highways	122 967	80 595	34 081	8 290	3	3	5	23
Power and communication transmission lines, towers, and related facilities	164 928	103 379	37 506	24 042	6	5	11	7
Sewers, water mains, and related facilities	451 483	346 840	58 787	45 855	4	4	7	9
Sewers, sewer lines, septic systems, and related facilities	269 039	206 398	39 269	23 371	3	3	10	12
Water mains and related facilities	182 443	140 442	19 517	22 483	6	6	6	12
Pipeline construction other than sewer or water lines	65 226	43 501	13 331	8 392	3	3	7	8
Blast furnaces, petroleum refineries, chemical complexes, etc.	164 511	76 526	37 645	50 338	2	2	3	3
Power plants	122 059	36 073	33 578	52 407	1	1	(Z)	1
Sewage treatment and water treatment plants	124 963	84 814	37 360	2 788	6	8	5	18
Other nonbuilding construction	494 677	376 659	53 189	64 841	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	621 622	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	20 446	107 740	88 548	110 000	122 867	109 543	(Z)	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	4 331	11 684	10 005	12 293	13 155	11 282	2	3	3	3	3	3
1522	Other residential buildings -----	197	924	904	975	1 029	790	13	12	11	11	13	12
1531	Operative builders -----	515	972	858	1 006	1 077	945	8	11	11	10	10	11
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	293	2 798	2 472	2 776	3 078	2 868	11	7	5	7	9	9
1542	Nonresidential buildings, n.e.c. ----	808	6 853	5 565	6 786	7 829	7 231	6	3	3	3	3	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	309	5 168	2 135	5 959	7 207	5 372	7	3	4	3	3	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	29	495	240	508	653	578	20	6	4	11	3	4
1623	Water, sewer, and utility lines -----	363	4 954	3 321	5 106	5 812	5 577	8	3	4	3	3	3
1629	Heavy construction, n.e.c. -----	468	2 844	1 832	3 092	3 503	2 949	8	5	6	5	5	5
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	2 641	14 150	13 027	14 015	15 711	13 847	2	2	2	2	2	2
1721	Painting and paper hanging -----	926	3 668	2 975	3 742	4 428	3 526	3	6	6	5	6	7
1731	Electrical work -----	1 840	12 394	11 866	11 972	13 229	12 511	2	2	2	2	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	882	4 302	3 498	4 450	4 817	4 444	4	4	5	4	4	4
1742	Plastering, drywall, and insulation work -----	592	3 881	3 827	3 869	4 115	3 713	5	4	4	5	5	5
1743	Terrazzo, tile, marble, and mosaic work -----	141	499	496	512	530	458	10	10	10	9	11	11
175	Carpentry and floor work:												
1751	Carpentry -----	1 628	6 226	5 593	6 086	6 398	6 825	3	4	4	4	4	3
1752	Floor laying and other floor work --	266	907	861	869	1 018	879	6	9	9	9	9	9
1761	Roofing, siding, and sheet metal work -----	872	5 509	4 320	5 412	6 637	5 668	4	4	5	4	4	4
1771	Concrete work -----	1 159	5 699	3 045	6 380	7 227	6 142	4	3	5	4	3	3
1781	Water well drilling -----	268	932	733	1 001	1 020	974	8	10	10	10	10	10
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	160	1 816	1 565	1 840	2 064	1 797	10	4	5	4	4	4
1793	Glass and glazing work -----	143	628	593	624	636	661	10	7	7	7	6	7
1794	Excavation work -----	619	2 491	1 676	2 844	2 974	2 468	6	5	7	5	5	5
1795	Wrecking and demolition work -----	55	530	499	566	564	491	14	3	4	3	4	4
1796	Installing building equipment, n.e.c. -----	160	3 236	3 271	2 833	3 408	3 433	11	3	2	2	6	3
1799	Special trade contractors, n.e.c. ----	783	4 179	3 371	4 484	4 748	4 113	6	4	4	4	4	4

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	6.9	25.9	149.0	.228	.328	.251	.290	.015
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.7	17.9	147.6	.165	.370	.292	.039	.007
1522	Other residential buildings -----	6.8	20.3	211.9	.139	.289	.386	*.146	.007
1531	Operative builders -----	4.5	34.2	828.6	.097	.311	.384	.020	.008
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	13.1	30.2	303.9	.136	.216	.514	.107	.010
1542	Nonresidential buildings, n.e.c. -----	12.6	31.0	374.1	.123	.238	.610	.041	.006
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	20.3	31.2	188.1	.202	.379	.207	.225	.031
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	21.1	35.7	219.3	.200	.314	.302	.143	.011
1623	Water, sewer, and utility lines -----	16.6	32.7	149.3	.267	.320	.132	.197	.032
1629	Heavy construction, n.e.c. -----	7.6	27.0	125.5	.268	.280	.157	.198	.047
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	7.4	29.1	138.9	.288	.377	.127	.489	.013
1721	Painting and paper hanging -----	4.9	20.3	71.8	.348	.274	.071	.493	.020
1731	Electrical work -----	8.9	30.9	110.9	.367	.343	.043	.563	.014
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.5	22.3	78.6	.318	.343	.052	.686	.013
1742	Plastering, drywall, and insulation work -----	7.9	23.5	91.7	.309	.343	.151	.726	.012
1743	Terrazzo, tile, marble, and mosaic work -----	4.5	24.8	95.6	.330	.426	.038	.600	.007
175	Carpentry and floor work:								
1751	Carpentry -----	4.8	19.3	90.7	.265	.352	.131	.455	.010
1752	Floor laying and other floor work -----	4.6	24.4	139.8	.234	.467	.121	.633	.016
1761	Roofing, siding, and sheet metal work -----	8.2	22.8	105.5	.280	.424	.071	.377	.012
1771	Concrete work -----	6.2	23.1	112.0	.258	.411	.093	.530	.018
1781	Water well drilling -----	4.5	20.4	110.6	.241	.399	.013	.153	.012
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	14.4	29.9	132.9	.285	.322	.126	.507	.017
1793	Glass and glazing work -----	6.8	26.3	143.0	.284	.538	.060	.697	.018
1794	Excavation work -----	5.1	26.4	119.2	.279	.305	.109	.507	.038
1795	Wrecking and demolition work -----	12.5	32.2	171.1	.242	.161	.158	.452	.056
1796	Installing building equipment, n.e.c. -----	25.2	20.5	76.8	.331	.252	.104	.249	.020
1799	Special trade contractors, n.e.c. -----	7.2	22.3	96.7	.312	.327	.125	.405	.019

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	DETROIT-ANN ARBOR-FLINT, MI CMSA											
15,16, 17	Construction industries	10 438	76 874	2 131 851	9 476 778	6 939 844	4 087 119	3 032 361	2 536 934	133 165	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 817	7 017	140 106	842 190	567 655	285 846	299 199	274 535	9 346	5	5
1522	Other residential buildings	119	738	12 942	98 489	56 038	28 246	29 881	42 451	661	17	16
1531	Operative builders	346	1 591	58 929	654 066	396 401	232 552	184 111	257 665	2 497	7	9
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	137	1 578	55 366	485 448	230 342	148 159	89 900	255 106	1 789	10	8
1542	Nonresidential buildings, n.e.c.	407	5 325	179 200	1 539 482	560 901	199 601	408 372	978 582	10 709	3	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	123	3 686	120 536	595 389	469 559	278 245	197 589	125 830	16 194	3	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	14	372	13 926	72 743	44 982	20 973	24 023	27 761	1 641	1	(Z)
1623	Water, sewer, and utility lines	217	2 829	97 751	384 514	327 848	199 102	129 599	56 666	14 425	5	5
1629	Heavy construction, n.e.c.	(S)	1 172	32 811	113 522	97 907	63 344	34 761	15 616	(S)	11	7
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 385	10 987	342 020	1 179 854	1 008 582	613 320	410 766	171 272	14 883	2	2
1721	Painting and paper hanging.....	524	2 435	54 732	157 267	143 188	103 692	40 669	14 078	2 390	6	3
1731	Electrical work	1 023	8 687	288 332	774 163	740 509	479 007	268 805	33 654	10 320	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work.....	447	2 334	54 997	173 175	165 447	111 208	54 924	7 728	2 849	6	8
1742	Plastering, drywall, and insulation work	285	2 519	63 686	192 816	167 989	102 531	68 008	24 827	1 286	6	4
1743	Terrazzo, tile, marble, and mosaic work	122	496	12 579	37 746	37 014	21 133	15 890	*733	(D)	11	11
175	Carpentry and floor work:											
1751	Carpentry	974	5 400	107 140	389 186	338 067	209 897	131 995	51 119	(S)	4	5
1752	Floor laying and other floor work ...	140	746	18 894	87 013	74 526	34 071	42 001	12 487	949	10	5
1761	Roofing, siding, and sheet metal work	480	4 206	103 447	378 815	343 823	187 364	157 334	34 992	7 372	5	8
1771	Concrete work	621	4 100	101 750	391 466	348 515	204 182	153 151	42 951	6 395	4	3
1781	Water well drilling	115	428	8 250	33 506	32 932	19 713	13 247	574	*1 124	16	13
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	85	1 674	54 027	194 112	174 005	114 204	62 305	20 107	2 602	4	8
1793	Glass and glazing work	95	687	19 210	67 436	62 578	34 188	32 999	4 858	(D)	10	7
1794	Excavation work	274	1 544	48 409	159 291	137 413	98 524	49 738	21 878	10 129	7	8
1795	Wrecking and demolition work	34	339	10 695	55 191	43 924	35 596	8 773	11 267	(D)	7	8
1796	Installing building equipment, n.e.c. ...	86	2 745	60 084	187 097	164 998	126 562	47 651	22 099	1 384	2	2
1799	Special trade contractors, n.e.c.	410	3 240	72 030	232 802	204 702	135 859	76 668	28 100	6 253	6	6
	Ann Arbor, MI PMSA											
15,16, 17	Construction industries	1 233	7 451	191 846	793 186	597 121	374 725	241 587	196 065	15 867	3	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	231	810	15 281	90 218	63 138	34 125	30 833	27 080	1 132	11	12
1522	Other residential buildings	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(D)	(S)	(S)
1531	Operative builders	39	148	5 927	64 188	41 227	23 971	21 502	22 961	(D)	23	22
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(S)	3 964	47 045	(D)	7 609	(S)	(D)	191	(S)	(D)
1542	Nonresidential buildings, n.e.c.	(S)	371	10 492	78 777	28 598	20 811	10 317	50 178	407	6	9
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	10	125	4 449	20 113	15 360	6 651	10 269	4 753	539	1	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	3	43	1 239	4 495	3 737	2 433	1 304	758	(D)	(Z)	(Z)
1623	Water, sewer, and utility lines	32	253	8 459	46 760	(D)	19 459	(D)	(D)	1 798	23	(D)
1629	Heavy construction, n.e.c.	(S)	144	3 727	14 222	(D)	8 684	(D)	(D)	(D)	7	(D)

MI-14 MICHIGAN

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	DETROIT-ANN ARBOR-FLINT, MI CMSA—Con.											
	Ann Arbor, MI PMSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	158	1 170	40 146	127 061	110 330	71 536	39 462	16 731	1 201	9	8
1721	Painting and paper hanging	51	237	5 264	14 547	(D)	9 884	2 767	(D)	582	24	(D)
1731	Electrical work	97	619	19 406	51 164	49 861	31 068	18 875	1 303	584	12	10
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	59	207	3 549	11 591	11 275	7 393	3 887	317	(D)	26	22
1742	Plastering, drywall, and insulation work	36	479	13 128	37 014	30 226	19 420	11 032	6 789	318	10	8
1743	Terrazzo, tile, marble, and mosaic work	6	16	243	677	677	417	260	—	(D)	(Z)	(Z)
175	Carpentry and floor work:											
1751	Carpentry	(S)	655	12 099	(S)	(S)	22 524	(S)	(S)	(S)	16	(S)
1752	Floor laying and other floor work	(S)	(D)	(D)	(D)	(D)	(D)	*871	(D)	(D)	(D)	(D)
1761	Roofing, siding, and sheet metal work	63	577	11 562	33 212	32 620	20 048	12 625	592	531	18	15
1771	Concrete work	60	373	9 544	33 355	(D)	20 870	14 080	(D)	(D)	12	(D)
1781	Water well drilling	30	180	3 374	11 298	(D)	7 062	4 115	(D)	*895	31	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	9	178	4 337	13 136	(D)	7 786	4 617	(D)	216	(Z)	(D)
1793	Glass and glazing work	(S)	50	1 322	7 872	(D)	2 853	3 950	(D)	(S)	8	(D)
1794	Excavation work	50	198	4 999	19 846	16 738	12 616	4 129	3 108	3 202	23	21
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c.	6	45	836	2 174	(D)	1 743	414	(D)	(Z)	(D)	(D)
1799	Special trade contractors, n.e.c.	62	416	6 970	22 945	21 212	12 713	9 091	*1 734	*890	19	20
	Detroit, MI PMSA											
15,16,17	Construction industries	8 483	64 119	1 803 987	8 161 916	5 924 886	3 442 855	2 615 927	2 237 030	108 583	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 434	5 572	112 249	664 582	444 803	221 837	234 413	219 780	7 096	6	6
1522	Other residential buildings	99	669	11 489	92 450	51 739	26 044	27 784	40 711	604	18	18
1531	Operative builders	302	1 408	51 999	583 180	351 065	206 305	160 579	232 115	1 910	8	10
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	124	1 341	46 137	395 773	192 438	120 520	76 913	203 335	1 594	11	9
1542	Nonresidential buildings, n.e.c.	337	4 600	159 805	1 424 423	516 104	158 312	393 778	908 319	9 702	3	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	98	3 366	110 463	549 919	432 199	253 908	180 981	117 720	14 856	3	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	11	329	12 687	68 248	41 245	18 540	22 719	27 003	(D)	2	(Z)
1623	Water, sewer, and utility lines	181	2 488	85 980	330 004	282 852	174 715	108 954	47 152	11 987	5	5
1629	Heavy construction, n.e.c.	(S)	928	26 264	88 651	76 119	48 032	28 225	12 533	2 442	14	9
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 129	8 817	274 129	953 567	815 088	495 144	334 129	138 479	12 621	2	2
1721	Painting and paper hanging	431	1 881	42 409	124 785	115 105	81 905	34 030	9 680	1 798	6	4
1731	Electrical work	836	7 465	249 878	678 486	647 005	418 299	231 716	31 480	8 304	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	374	2 029	48 223	153 285	146 045	98 794	47 930	7 240	2 485	7	9
1742	Plastering, drywall, and insulation work	219	1 926	48 565	148 397	131 297	80 200	53 420	17 100	901	6	4
1743	Terrazzo, tile, marble, and mosaic work	116	481	12 336	37 069	36 337	20 716	15 630	*733	*916	12	11
175	Carpentry and floor work:											
1751	Carpentry	794	4 626	92 922	341 636	294 700	181 740	116 267	46 936	2 153	5	5
1752	Floor laying and other floor work	122	723	18 328	84 504	72 214	32 722	40 993	12 290	934	10	5
1761	Roofing, siding, and sheet metal work	397	3 219	80 606	311 194	279 259	147 015	132 776	31 935	6 416	6	9
1771	Concrete work	534	3 535	89 051	343 551	307 111	176 865	132 377	36 440	5 488	4	4

CONSTRUCTION—GEOGRAPHIC AREA SERIES

MICHIGAN MI—15

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	DETROIT-ANN ARBOR-FLINT, MI CMSA—Con.											
	Detroit, MI PMSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1781	Water well drilling	62	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	68	1 397	47 384	176 857	157 989	102 856	57 164	18 867	2 300	4	9
1793	Glass and glazing work	73	521	14 603	51 195	48 219	27 188	23 288	2 976	332	12	9
1794	Excavation work	199	1 162	38 042	122 911	106 207	76 606	40 441	16 704	5 327	7	9
1795	Wrecking and demolition work	31	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ..	73	2 548	56 241	177 563	155 594	119 581	45 175	21 969	1 305	2	2
1799	Special trade contractors, n.e.c.	316	2 602	60 551	190 664	166 763	112 573	60 850	23 900	5 249	6	6
	Flint, MI PMSA											
15,16,17	Construction industries	722	5 305	136 018	521 677	417 837	269 539	174 846	103 840	8 715	5	5
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	152	635	12 576	87 390	59 714	29 885	33 953	27 675	1 118	18	20
1522	Other residential buildings	*7	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(D)	(S)	(S)
1531	Operative builders	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(S)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	6	149	5 266	42 629	(D)	20 029	9 253	(D)	4	22	(D)
1542	Nonresidential buildings, n.e.c.	35	354	8 903	36 283	16 199	20 479	4 278	20 085	600	28	22
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	194	5 624	25 357	22 000	17 686	6 339	3 357	799	27	30
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	*4	87	3 312	7 749	(D)	*4 929	(D)	(D)	641	38	(D)
1629	Heavy construction, n.e.c.	*14	(S)	(S)	(S)	(D)	(S)	2 333	(D)	(D)	(S)	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	99	999	27 746	99 225	83 164	46 640	37 174	16 062	1 061	12	11
1721	Painting and paper hanging	43	317	7 059	17 935	(D)	11 903	3 872	(D)	(S)	18	(D)
1731	Electrical work	90	602	19 048	44 513	43 642	29 640	18 215	871	1 432	19	15
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	*15	97	3 225	8 299	8 127	5 020	3 107	*172	(D)	25	26
1742	Plastering, drywall, and insulation work	*29	*114	1 994	*7 404	6 466	2 910	*3 556	*938	68	44	39
1743	Terrazzo, tile, marble, and mosaic work	—	—	—	—	—	—	—	—	—	—	—
175	Carpentry and floor work:											
1751	Carpentry	(S)	(S)	(S)	12 628	11 506	5 633	5 884	(S)	75	(S)	10
1752	Floor laying and other floor work ..	(S)	(D)	(D)	(D)	(D)	(D)	(S)	(D)	(D)	(D)	(D)
1761	Roofing, siding, and sheet metal work	(S)	410	11 278	34 408	31 943	20 301	11 933	2 465	425	10	7
1771	Concrete work	*27	192	3 155	14 559	(D)	6 447	6 694	(D)	(D)	30	(D)
1781	Water well drilling	*23	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(S)	(S)	(D)
1793	Glass and glazing work	(S)	116	3 285	8 369	(D)	4 147	5 762	(D)	(D)	26	(D)
1794	Excavation work	*25	184	5 368	16 535	14 469	9 302	5 169	2 066	1 599	24	25
1795	Wrecking and demolition work	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c. ..	6	152	3 008	7 360	(D)	5 238	*2 062	(D)	(D)	14	(D)
1799	Special trade contractors, n.e.c.	32	(S)	(S)	(S)	(S)	(S)	(S)	(S)	115	(S)	(S)

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	GRAND RAPIDS–MUSKEGON–HOLLAND, MI MSA											
15,16,17	Construction industries	2 355	19 496	505 396	2 148 090	1 642 629	953 961	745 267	505 461	43 752	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	505	1 995	38 105	235 622	163 192	76 431	89 433	72 430	4 157	8	9
1522	Other residential buildings	11	78	2 533	*18 562	*11 037	*5 641	5 405	7 524	15	32	46
1531	Operative builders	54	254	10 228	56 696	34 745	14 745	29 016	21 951	554	23	27
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	40	466	14 535	111 115	47 776	*10 007	40 021	63 339	519	13	13
1542	Nonresidential buildings, n.e.c.	92	1 670	47 486	369 488	162 592	107 282	64 595	206 896	2 820	10	8
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	299	9 536	51 707	43 828	17 075	29 057	7 878	1 986	12	9
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	3	(D)	4 841	(D)	(D)	(D)	6 864	(D)	1 548	(D)	(D)
1623	Water, sewer, and utility lines	40	1 136	38 563	141 662	120 656	81 516	39 897	21 006	7 745	3	3
1629	Heavy construction, n.e.c.	52	729	19 050	73 480	61 561	46 254	18 532	11 919	4 819	6	5
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	334	2 740	77 955	286 462	252 251	142 310	122 421	34 211	(S)	5	4
1721	Painting and paper hanging.....	105	823	15 633	44 500	42 020	30 693	11 335	*2 480	414	22	24
1731	Electrical work	173	2 440	77 343	221 367	211 312	134 483	79 359	10 055	3 847	3	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work.....	125	853	18 323	51 533	48 148	28 404	19 835	3 385	1 442	9	8
1742	Plastering, drywall, and insulation work	109	932	21 637	80 986	66 890	40 160	26 909	14 096	442	10	7
1743	Terrazzo, tile, marble, and mosaic work	5	*39	(D)	3 625	(D)	*1 189	1 591	(D)	(D)	61	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	489	11 324	39 151	34 916	16 978	19 038	*4 235	(S)	10	10
1752	Floor laying and other floor work	24	135	2 631	8 924	8 576	5 050	3 602	348	(S)	4	2
1761	Roofing, siding, and sheet metal work	119	1 239	26 283	89 525	86 138	44 991	42 143	3 387	1 755	8	7
1771	Concrete work	163	1 068	25 642	90 274	84 810	47 482	40 002	5 464	2 810	11	9
1781	Water well drilling	19	81	2 139	8 818	8 683	4 805	3 898	135	248	5	12
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	*14	101	2 397	5 225	5 058	3 904	(D)	167	88	15	8
1793	Glass and glazing work	6	80	1 974	7 586	(D)	2 534	6 074	(D)	95	(Z)	(D)
1794	Excavation work.....	68	425	9 447	37 921	33 918	23 479	11 614	*4 003	2 017	18	20
1795	Wrecking and demolition work	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	31	545	9 588	28 105	27 041	18 418	9 764	1 064	106	15	13
1799	Special trade contractors, n.e.c.	102	644	13 765	50 701	45 851	28 108	19 477	4 851	923	12	11

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Ohio. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 81,102 establishments in this State operating in the construction industries. These establishments accounted for \$24.2 billion in total dollar value of business done.

Most of the 81,102 construction establishments were small. Of the total, 57,750 were nonemployers, and over half of the employer establishments had less than 5 employees. The 9,245 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 81 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$22.6 billion in total dollar value of business done. Of this amount, \$22.0 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$5.8 billion, leaving net value of construction work of \$16.3 billion. In addition, these establishments paid out \$8.1 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$9.4 billion. (See Introduction and appendixes for explanation of terms.)

There were 23,352 establishments with total employment averaging 190,335 during the year. Total payroll for 1992 was \$5.0 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 57,750 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$1.6 billion. Most of these establishments, about 84 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

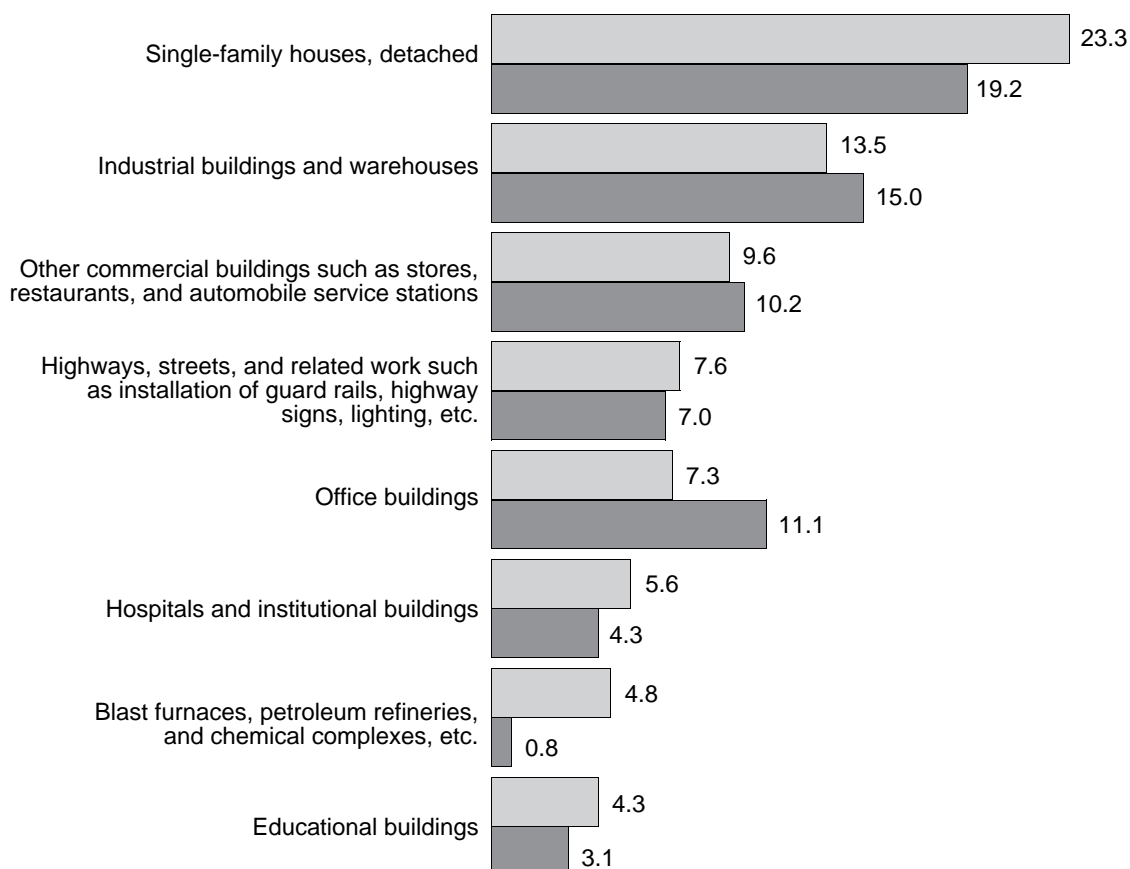



Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

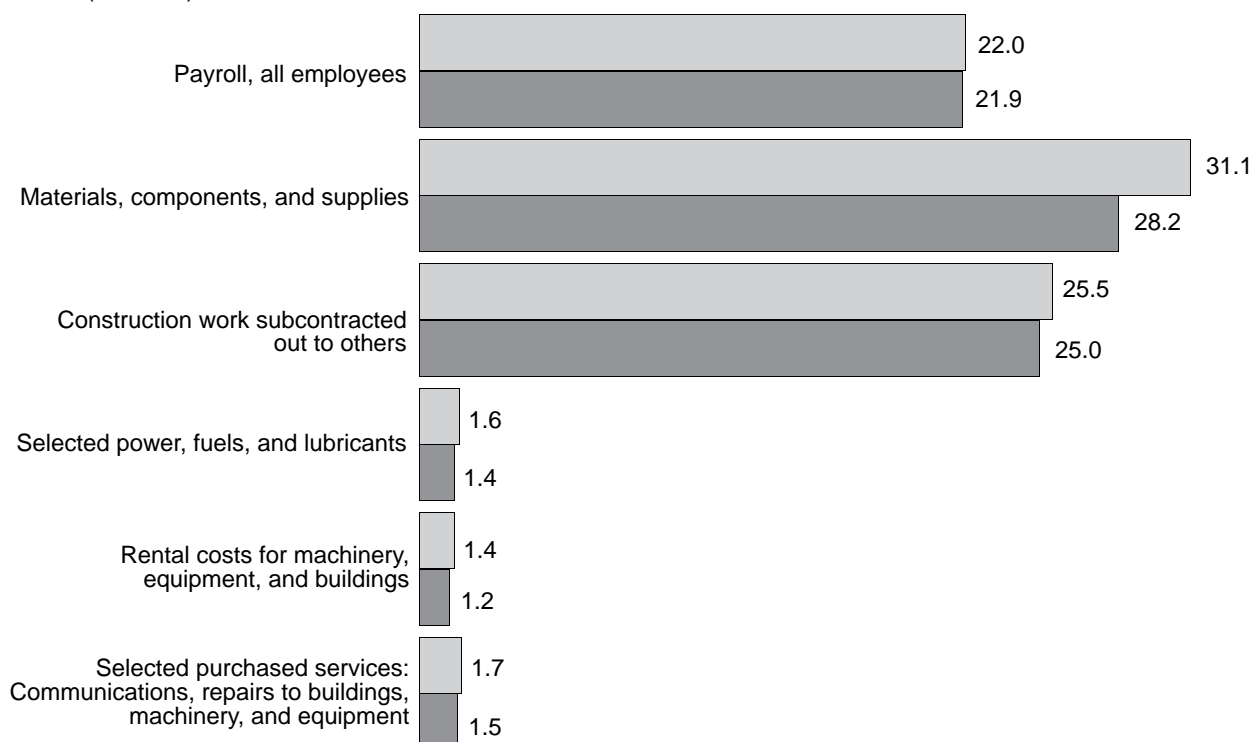


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	81 102	67 162	190 335	24 161 161	57 750	56 881	1 601 076	23 352	10 281	190 335	22 560 085	(Z)	1
15	Building construction—General contractors and operative builders ----	15 405	11 044	43 162	9 040 885	8 764	8 190	554 834	6 641	2 854	43 162	8 486 051	1	1
16	Heavy construction other than building construction—contractors -----	2 058	1 071	29 078	4 690 194	716	685	21 251	1 342	386	29 078	4 668 943	1	1
17	Special trade contractors -----	63 639	55 047	118 094	10 430 082	48 270	48 006	1 024 991	15 369	7 041	118 094	9 405 091	1	1
1711	Plumbing, heating, and air-conditioning --	7 209	5 230	27 773	2 697 181	4 071	4 022	124 307	3 138	1 208	27 773	2 572 874	1	1
1731	Electrical work -----	5 366	3 987	18 893	1 620 495	3 439	3 371	59 206	1 927	(S)	18 893	1 561 289	1	1
	1987													
15, 16, 17	Construction industries² -----	76 142	60 797	181 669	21 119 999	55 341	54 814	2 399 380	20 801	5 983	181 669	18 720 619	1	1
15	Building construction—General contractors and operative builders ----	16 243	11 455	43 939	8 537 189	10 423	9 849	775 701	5 820	1 606	43 939	7 761 488	1	2
16	Heavy construction other than building construction—contractors -----	1 771	811	25 890	3 242 083	582	573	51 603	1 189	238	25 890	3 190 480	1	1
17	Special trade contractors -----	56 993	47 506	111 397	8 920 872	43 348	43 406	1 217 186	13 645	4 100	111 397	7 703 686	1	1
1711	Plumbing, heating, and air-conditioning --	6 447	4 462	27 187	2 192 717	3 752	3 743	152 647	2 695	719	27 187	2 040 070	1	1
1731	Electrical work -----	4 517	3 231	16 303	1 251 763	2 904	2 873	75 965	1 613	358	16 303	1 175 798	1	1

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	23 352	190 335	144 844	4 967 288	3 503 473	22 014 084	16 263 672	9 436 350
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4 130	15 890	11 699	289 410	191 175	1 988 607	1 427 032	695 571
1522	Other residential buildings -----	222	1 642	1 163	43 213	21 796	239 739	125 916	76 021
1531	Operative builders -----	666	3 996	1 867	121 682	42 246	1 675 382	999 513	537 372
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	406	5 530	3 936	154 271	98 674	908 944	529 112	300 469
1542	Nonresidential buildings, n.e.c. -----	1 217	16 104	10 709	457 105	272 392	3 449 300	1 426 004	749 491
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	375	10 672	8 699	355 290	261 707	1 750 712	1 391 058	610 619
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	57	1 712	1 294	61 359	46 309	278 470	216 309	126 190
1623	Water, sewer, and utility lines -----	340	6 479	5 276	186 741	144 667	692 701	609 504	393 386
1629	Heavy construction, n.e.c. -----	570	10 215	7 222	423 774	277 212	1 785 950	1 129 337	792 613
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	3 138	27 773	20 635	739 849	530 323	2 545 882	2 227 564	1 282 644
1721	Painting and paper hanging -----	1 369	6 549	5 405	125 592	96 895	359 890	336 004	244 206
1731	Electrical work -----	1 927	18 893	14 667	548 733	406 846	1 537 927	1 451 672	896 254
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	1 180	6 622	5 840	133 448	112 484	392 817	372 432	247 483
1742	Plastering, drywall, and insulation work -----	682	6 769	5 537	156 796	120 835	460 377	422 405	267 945
1743	Terrazzo, tile, marble, and mosaic work -----	148	771	632	18 057	14 561	57 032	55 519	31 705
175	Carpentry and floor work:								
1751	Carpentry -----	1 685	7 840	6 349	144 311	112 887	534 421	452 534	281 347
1752	Floor laying and other floor work -----	365	2 156	1 504	50 655	30 852	198 350	181 877	98 976
1761	Roofing, siding, and sheet metal work -----	1 271	9 026	7 051	204 565	148 631	738 428	680 319	396 254
1771	Concrete work -----	1 159	9 720	8 263	226 928	183 530	807 378	732 737	389 283
1781	Water well drilling -----	105	447	336	11 212	7 991	40 283	39 198	24 884
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	147	2 732	2 297	73 110	55 218	206 595	183 293	124 650
1793	Glass and glazing work -----	226	1 329	867	34 551	22 549	117 153	111 616	60 336
1794	Excavation work -----	798	3 929	3 166	88 366	69 804	335 132	300 666	204 672
1795	Wrecking and demolition work -----	49	1 028	820	20 515	14 698	71 952	67 973	52 007
1796	Installing building equipment, n.e.c. -----	178	4 651	3 740	121 798	94 279	326 555	310 460	232 852
1799	Special trade contractors, n.e.c. -----	942	7 859	5 869	175 957	124 912	514 109	483 618	319 120

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
7 373 324	5 750 412	5 617 103	309 379	339 009	3 004 919	181 669	18 095 164	8 287 663	(Z)	1	2	15, 16, 17
												15
769 251	561 576	53 276	14 328	14 729	126 638	12 831	1 309 904	513 005	3	4	11	152
60 672	113 824	7 531	2 272	2 390	18 168	3 447	437 647	148 958	9	10	13	1521
536 230	675 869	6 049	7 623	9 138	117 125	4 531	1 368 380	375 844	5	6	16	1531
254 492	379 832	84 438	12 727	7 983	87 881	6 328	1 026 470	306 643	4	4	13	154
752 085	2 023 296	223 647	25 773	31 696	254 043	16 802	3 294 245	961 420	2	2	11	1542
												16
821 258	359 654	364 139	34 143	56 368	523 522	9 488	1 285 954	601 745	1	1	4	1611
93 078	62 160	44 013	4 309	9 219	50 896	1 660	203 375	94 500	2	2	7	162
220 929	83 197	106 591	22 018	30 874	252 278	6 402	581 918	360 060	3	4	13	1622
449 246	656 613	184 366	43 877	35 355	356 505	8 340	996 536	501 273	2	2	7	1623
												17
971 912	318 318	1 068 000	36 563	31 659	271 145	27 187	2 017 620	1 044 399	1	1	7	1711
96 910	23 886	168 156	6 899	6 298	47 730	6 564	303 382	224 404	4	4	15	1721
578 781	86 255	793 901	16 657	18 798	173 422	16 303	1 160 626	700 493	1	1	5	1731
126 348	20 385	259 509	4 534	4 998	56 676	7 347	383 660	236 160	4	5	13	174
162 999	37 972	399 842	5 858	5 209	42 789	7 272	453 007	276 207	4	3	13	1741
23 996	1 513	37 783	478	555	5 723	720	63 198	33 590	10	10	21	1742
												175
184 569	81 887	260 659	4 361	4 847	42 987	6 433	366 700	194 829	4	5	15	1751
88 030	16 472	117 051	2 773	2 275	16 738	1 860	142 268	77 124	4	3	13	1752
299 560	58 109	227 191	11 676	9 499	97 914	9 820	676 917	383 140	3	3	10	1761
350 857	74 641	479 412	12 164	19 113	146 325	10 094	732 113	402 440	2	2	10	1771
14 355	1 085	6 139	810	1 688	14 770	387	26 136	14 801	8	6	15	1781
												179
71 569	23 302	144 119	6 057	4 269	34 099	2 028	138 590	96 145	3	3	3	1791
56 370	5 537	92 810	2 083	1 586	11 101	1 290	103 405	53 224	7	8	37	1793
100 056	34 465	201 433	12 628	14 976	119 336	4 660	361 722	244 880	6	5	13	1794
18 209	3 979	21 466	1 162	401	20 718	628	36 809	32 049	4	4	(Z)	1795
81 472	16 095	86 371	5 695	4 939	28 827	2 655	219 415	162 322	2	2	2	1796
190 089	30 490	179 211	11 912	10 148	87 562	6 149	365 242	225 878	4	3	14	1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	23 352	20 801	18 078	20 752	(Z)	1	1	2
Proprietors and working partners.....	10 281	5 983	6 544	11 710	1	3	3	3
All employees**	190 335	181 669	151 902	180 454	(Z)	1	1	1
Construction workers:								
March.....	124 673	121 517	102 185	120 747	1	1	1	1
May	147 329	143 971	123 536	152 756	1	1	1	1
August	159 056	159 531	132 469	166 500	1	1	1	1
November.....	148 318	147 997	120 012	156 233	1	1	1	1
Average.....	144 844	143 254	121 582	149 199	(Z)	1	1	1
Other employees:								
March.....	45 444	37 432	30 134	30 086	1	1	1	1
May	45 524	38 156	(NA)	(NA)	1	1	(NA)	(NA)
August	45 439	39 241	(NA)	(NA)	1	1	(NA)	(NA)
November.....	45 555	38 850	(NA)	(NA)	1	1	(NA)	(NA)
Average.....	45 491	38 420	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	4 967 288	4 094 094	2 902 090	2 595 614	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	3 503 473	3 011 320	2 210 000	2 049 643	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	1 463 815	1 082 774	692 090	545 971	1	1	(Z)	1
First-quarter payroll, all employees	1 021 701	847 432	610 977	478 812	(Z)	1	1	(Z)
Fringe benefits, all employees	1 352 135	973 184	551 765	508 952	1	1	1	(Z)
Legally required expenditures.....	823 488	612 189	385 737	272 853	1	1	1	(Z)
Voluntary expenditures.....	528 647	360 994	166 027	236 099	1	1	1	(Z)
Dollar value of business done	22 560 085	18 720 619	10 701 097	9 893 166	1	1	1	1
Value of construction work	22 014 084	18 095 164	10 360 020	9 530 951	1	1	1	1
Value of construction work subcontracted in from others	5 617 103	4 080 286	2 376 619	2 094 606	1	1	1	1
Other business receipts	546 001	430 691	281 612	362 216	2	3	1	1
Net value of construction†	16 263 672	13 411 631	7 792 679	7 384 737	1	1	1	1
Value added††	9 436 350	8 287 663	4 948 283	4 393 828	1	1	(Z)	(Z)
Selected costs	13 123 736	10 238 192	5 693 350	5 377 010	1	1	1	1
Materials, components, and supplies	7 011 436	5 288 495	2 932 454	3 080 198	1	1	1	1
Construction work subcontracted out to others	5 750 412	4 683 533	2 567 341	2 146 214	1	1	1	1
Selected power, fuels, and lubricants	361 888	266 164	193 554	150 598	1	1	1	1
Electricity.....	74 429	37 891	25 428	18 551	1	2	1	1
Natural gas	30 859	13 170	11 652	9 691	1	2	2	2
Gasoline and diesel fuel	237 223	197 115	142 730	103 260	1	1	1	1
On highway use.....	171 688	142 292	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use.....	65 535	54 823	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases.....	19 376	17 986	13 743	19 102	2	3	2	2
Rental cost for machinery, equipment, and buildings	309 379	232 828	135 502	116 771	2	1	1	1
For machinery and equipment	202 850	157 186	95 172	92 367	2	2	1	1
For buildings.....	106 529	75 642	40 329	24 404	3	2	2	1
Selected purchased services	375 719	282 514	164 574	155 797	2	1	1	1
Communication services	112 381	75 385	48 964	39 079	2	2	1	1
Repairs to buildings and other structures	19 151	16 884	10 662	8 651	5	4	2	3
Repairs to machinery and equipment	244 188	190 244	104 948	108 068	2	1	1	1
Ownership of construction projects:								
Value of construction work	22 014 084	18 095 164	10 360 020	9 530 951	1	1	1	1
Government owned	5 247 662	3 852 064	2 249 975	2 014 716	1	1	1	1
Federal	1 103 936	788 913	(NA)	(NA)	2	3	(NA)	(NA)
State and local	4 143 726	3 063 151	(NA)	(NA)	2	2	(NA)	(NA)
Privately owned	16 766 422	14 243 100	8 110 044	7 516 235	1	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	2 826 847	1 938 881	2	3
Capital expenditures, other than land -----	339 009	294 167	2	2
New -----	257 692	221 791	2	2
Used -----	81 317	72 376	5	4
Retirements and disposition of depreciable assets -----	160 936	79 667	5	4
End-of-year gross book value of depreciable assets -----	3 004 919	2 153 382	2	3
Depreciation charges during year -----	320 659	244 305	2	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	454 983	474 577	4	10
Capital expenditures, other than land -----	30 784	36 652	6	5
New buildings and other structures -----	24 032	24 214	7	5
Used buildings and other structures -----	6 752	12 438	10	9
Retirements and disposition of depreciable assets -----	23 917	15 042	8	13
End-of-year gross book value of depreciable assets -----	461 849	496 187	4	10
Depreciation charges during year -----	35 835	32 693	6	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	2 371 864	1 464 304	2	1
Capital expenditures, other than land -----	308 225	257 515	2	2
New machinery and equipment, including automobiles and trucks -----	233 660	197 577	3	2
New automobiles and trucks, intended primarily for highway use -----	80 443	90 321	4	3
Used machinery and equipment, including automobiles and trucks -----	74 565	59 938	6	4
Retirements and disposition of depreciable assets -----	137 019	64 624	6	4
End-of-year gross book value of depreciable assets -----	2 543 070	1 657 194	2	1
Depreciation charges during year -----	284 824	211 612	2	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	23 352	(Z)
Value of construction work	22 014 084	1
Establishments with inventories:		
Number	6 779	2
Value of construction work	8 844 105	1
Inventories ¹ :		
End of 1992, materials and supplies	302 956	5
End of 1991, materials and supplies	293 405	6
Establishments with no inventories:		
Number	9 061	2
Value of construction work	9 218 514	1
Establishments not reporting:		
Number	7 512	2
Value of construction work	3 951 465	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	23 352	14 108	4 847	2 557	1 349	328	131	20	10	3
All employees** -----	190 335	27 103	30 928	33 829	39 373	22 140	18 773	6 768	6 808	4 612
Payroll, all employees -----	4 967 288	440 388	627 468	839 017	1 120 721	672 403	620 021	199 387	190 197	257 687
Dollar value of business done -----	22 560 085	2 893 377	2 928 502	3 554 051	4 547 391	2 843 047	2 864 209	1 104 582	646 876	1 178 050
Value of construction work -----	22 014 084	2 842 271	2 874 897	3 498 271	4 440 100	2 792 482	2 782 325	1 092 776	605 234	1 085 729
Net value of construction work† -----	16 263 672	2 255 903	2 230 393	2 730 453	3 402 946	2 076 379	1 827 323	654 740	1 085 536	(D)
Value added†† -----	9 436 350	1 251 251	1 279 768	1 605 787	2 066 518	1 212 291	954 335	325 740	740 660	(D)
Cost of materials, components, supplies, and fuels -----	7 373 324	1 055 758	1 004 230	1 180 446	1 443 720	914 653	954 872	340 806	478 839	(D)
Cost of construction work subcontracted out to others -----	5 750 412	586 368	644 504	767 818	1 037 154	716 103	955 002	438 036	605 427	(D)
Rental cost for machinery, equipment, and buildings -----	309 379	29 753	34 771	55 909	63 940	44 547	37 473	18 701	24 284	(D)
Capital expenditures, other than land -----	339 009	48 728	36 914	61 679	72 969	49 552	39 445	10 326	12 694	6 702
End-of-year gross book value of depreciable assets -----	3 004 919	376 396	381 982	518 344	666 862	351 032	388 711	160 063	118 955	42 574
1987										
All employees** -----	181 669	23 011	29 560	32 488	39 203	20 741	18 752	8 073	2 779	7 060
Value of construction work -----	18 095 164	2 052 181	2 220 816	2 873 589	3 890 582	2 494 284	2 522 100	1 207 198	834 413	(D)
Value added†† -----	8 287 663	890 232	1 065 602	1 406 241	1 875 144	1 096 947	981 959	538 971	134 212	298 354
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	(Z)	2	3	3	1	1	(Z)	(Z)	(Z)	(Z)
Net value of construction work† -----	1	3	3	3	1	(Z)	(Z)	(Z)	(Z)	(D)
Capital expenditures, other than land -----	2	9	9	7	3	(Z)	(Z)	(Z)	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	23 352	(S)	(S)	3 170	6 360	4 298	2 680	2 336	904	398	302
All employees** -----	190 335	(S)	(S)	5 177	18 315	22 125	23 488	34 615	24 666	17 017	42 129
Payroll, all employees -----	4 967 288	(S)	(S)	58 762	269 170	401 798	497 302	893 899	717 479	565 781	1 540 092
Dollar value of business done -----	22 560 085	(S)	(S)	230 528	1 025 765	1 500 424	1 871 020	3 632 491	3 132 747	2 698 818	8 387 809
Value of construction work -----	22 014 084	(S)	(S)	228 320	1 015 475	1 481 310	1 834 716	3 559 452	3 068 800	2 631 112	8 114 723
Net value of construction work† -----	16 263 672	(S)	(S)	211 485	916 615	1 317 623	1 575 145	2 925 868	2 391 449	1 949 413	4 901 115
Value added†† -----	9 436 350	(S)	(S)	130 373	551 876	767 821	950 731	1 720 419	1 427 932	1 118 423	2 721 964
Cost of materials, components, supplies, and fuels -----	7 373 324	(S)	(S)	83 320	375 029	568 915	660 718	1 278 489	1 027 464	898 695	2 452 236
Cost of construction work subcontracted out to others -----	5 750 412	(S)	(S)	(S)	98 860	163 688	259 571	633 584	677 351	681 699	3 213 609
Rental cost for machinery, equipment, and buildings -----	309 379	(S)	(S)	(S)	16 358	21 066	31 930	49 981	42 744	34 676	109 138
Capital expenditures, other than land -----	339 009	(S)	(S)	6 168	24 153	28 289	25 701	59 875	52 902	35 962	104 687
End-of-year gross book value of depreciable assets -----	3 004 919	(S)	(S)	52 325	174 902	223 134	261 690	548 818	475 935	315 585	936 431
1987											
All employees** -----	181 669	(S)	(S)	(S)	18 740	19 233	22 782	32 984	24 536	17 699	36 680
Value of construction work -----	18 095 164	(S)	(S)	(S)	907 185	1 150 271	1 621 755	3 002 666	2 712 386	2 176 368	6 218 960
Value added†† -----	8 287 663	(S)	(S)	(S)	502 282	614 178	862 475	1 483 754	1 293 040	980 983	2 369 401
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	(S)	(S)	5	4	4	3	2	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	4	3	3	3	3	3	2	(Z)
Capital expenditures, other than land -----	2	(S)	(S)	13	10	11	9	7	6	8	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	22 014 084	12 578 309	5 605 894	3 313 860	1	1	1	1
Building construction	16 027 421	9 516 028	4 344 889	2 166 504	1	1	1	1
Single-family houses	5 692 767	4 033 154	1 023 512	636 101	2	3	3	3
Single-family houses, detached	5 122 161	3 635 865	916 648	569 648	2	3	3	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	570 606	397 289	106 864	66 453	6	6	17	9
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	553 893	338 223	117 341	98 329	7	11	6	5
Other residential buildings, including hotels, motels, and tourist cabins	133 814	69 268	38 441	26 105	6	4	14	15
Office buildings	1 605 651	807 499	545 596	252 556	2	2	2	3
Other commercial buildings such as stores, restaurants, and automobile service stations	2 111 938	1 278 623	546 993	286 323	2	3	3	3
Industrial buildings and warehouses	2 965 598	1 334 549	1 044 027	587 022	1	2	2	2
Industrial buildings	2 525 349	1 053 732	934 336	537 281	1	2	2	2
Warehouses	440 249	280 816	109 691	49 742	4	5	3	6
Religious buildings	257 081	127 266	91 412	38 402	3	4	2	9
Educational buildings	937 232	488 825	360 485	87 922	1	1	3	4
Hospitals and institutional buildings	1 242 777	692 357	454 227	96 193	2	3	2	4
Amusement, social, and recreational buildings, indoors	177 334	114 747	43 347	19 240	5	7	6	12
Other nonresidential buildings	349 337	231 519	79 508	38 310	4	4	5	11
Nonbuilding construction	5 470 642	3 062 280	1 261 006	1 147 356	1	1	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 684 071	598 924	559 766	525 381	1	4	3	2
Private driveways and parking areas	208 128	112 871	42 849	52 409	5	6	9	8
Bridges, tunnels, and elevated highways	421 327	185 234	155 484	80 609	3	1	7	11
Conservation and development construction	153 494	128 055	12 916	12 523	8	8	20	24
Power and communication transmission lines, towers, and related facilities	176 570	118 087	35 372	23 111	3	4	4	6
Sewers, water mains, and related facilities	665 833	504 382	94 434	67 017	4	5	5	6
Sewers, sewer lines, septic systems, and related facilities	420 328	318 809	55 392	46 127	4	5	7	7
Water mains and related facilities	245 504	185 572	39 042	20 890	6	8	5	7
Pipeline construction other than sewer or water lines	188 339	130 989	26 561	30 788	4	3	5	16
Blast furnaces, petroleum refineries, chemical complexes, etc.	1 054 603	(D)	(D)	156 498	(Z)	(D)	(D)	2
Power plants	268 127	(D)	(D)	118 805	2	(D)	(D)	2
Sewage treatment and water treatment plants	286 052	157 274	112 693	16 085	2	1	4	8
Sewage treatment plants	165 708	120 401	36 128	9 179	3	1	11	12
Water treatment plants	120 345	36 873	76 565	6 906	2	5	1	10
Other nonbuilding construction	364 098	226 521	73 447	64 130	4	4	6	6
Construction work, n.s.k.	516 021	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1987								
Value of construction work	18 095 164	11 156 862	3 881 089	2 322 103	1	1	1	1
Building construction	13 314 436	8 804 556	2 947 718	1 562 163	1	1	1	2
Single-family houses	3 976 182	2 852 575	684 915	438 691	3	3	3	4
Single-family houses, detached	3 474 082	2 450 001	630 951	393 129	2	3	4	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	502 099	402 573	53 963	45 562	10	12	13	11
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	622 168	496 465	62 220	63 482	7	8	8	8
Other residential buildings, including hotels, motels, and tourist cabins	306 711	203 247	63 622	39 841	6	8	8	6
Office buildings	2 005 901	1 380 765	451 826	173 310	1	2	2	2
Other commercial buildings such as stores, restaurants, and automobile service stations	1 847 908	1 190 760	430 711	226 435	2	2	3	3
Industrial buildings and warehouses	2 715 059	1 598 674	692 161	424 224	1	1	2	3
Industrial buildings	2 207 728	1 210 676	620 504	376 547	1	1	2	3
Warehouses	507 331	387 998	71 656	47 676	2	3	4	4
Religious buildings	161 353	78 927	53 766	28 660	3	5	5	6
Educational buildings	567 867	332 689	171 151	64 027	2	3	4	4
Hospitals and institutional buildings	786 635	456 015	268 994	61 625	1	2	3	3
Amusement, social, and recreational buildings, indoors	110 072	76 872	24 886	8 313	4	4	8	7
Other nonresidential buildings	214 580	137 567	43 466	33 555	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	4 045 619	2 352 306	933 371	759 942	1	1	1	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 275 456	621 657	272 953	380 845	2	2	2	3
Private driveways and parking areas	210 987	138 663	31 476	40 848	5	5	7	10
Bridges, tunnels, and elevated highways	273 424	143 641	95 170	34 612	2	1	1	13
Power and communication transmission lines, towers, and related facilities	119 230	87 346	12 303	19 580	5	4	15	14
Sewers, water mains, and related facilities	525 899	360 559	122 289	43 050	3	4	4	5
Sewers, sewer lines, septic systems, and related facilities	362 041	263 206	69 287	29 547	3	3	4	5
Water mains and related facilities	163 858	97 353	53 001	13 503	5	7	5	8
Pipeline construction other than sewer or water lines	110 061	70 937	25 358	13 765	4	5	2	3
Blast furnaces, petroleum refineries, chemical complexes, etc.	138 209	43 406	39 074	55 728	2	2	3	1
Power plants	403 913	223 196	117 803	62 913	1	2	3	2
Sewage treatment and water treatment plants	522 295	383 850	115 933	22 512	2	2	3	6
Sewage treatment plants	372 001	273 377	84 245	14 378	1	2	2	9
Water treatment plants	150 294	110 472	31 687	8 133	5	5	8	2
Other nonbuilding construction	466 145	279 051	101 012	86 089	7	7	19	12
Construction work, n.s.k.	735 109	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	23 352	144 844	124 673	147 329	159 056	148 318	(Z)	(Z)	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	4 130	11 699	10 582	12 033	12 836	11 346	2	3	4	3	3	4
1522	Other residential buildings -----	222	1 163	1 083	1 289	1 245	1 033	14	10	10	13	12	10
1531	Operative builders -----	666	1 867	1 707	1 886	2 006	1 868	7	7	7	7	6	6
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	406	3 936	3 341	3 841	4 321	4 243	8	4	4	5	5	5
1542	Nonresidential buildings, n.e.c. ----	1 217	10 709	9 749	10 439	11 874	10 773	5	2	2	2	2	2
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	375	8 699	4 494	9 865	11 021	9 415	5	2	2	2	1	2
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	57	1 294	980	1 511	1 597	1 088	10	2	2	2	1	2
1623	Water, sewer, and utility lines -----	340	5 276	4 273	5 379	5 935	5 517	8	3	2	3	3	3
1629	Heavy construction, n.e.c. -----	570	7 222	6 317	8 302	6 755	7 514	7	3	2	2	3	3
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	3 138	20 635	19 534	20 405	21 471	21 132	2	1	1	2	1	2
1721	Painting and paper hanging -----	1 369	5 405	3 964	5 585	6 859	5 212	3	4	5	4	4	4
1731	Electrical work -----	1 927	14 667	14 336	14 342	15 259	14 732	2	1	1	1	1	1
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	1 180	5 840	4 646	6 202	6 387	6 125	3	4	4	4	4	4
1742	Plastering, drywall, and insulation work -----	682	5 537	5 196	5 531	5 796	5 626	4	4	3	4	4	3
1743	Terrazzo, tile, marble, and mosaic work -----	148	632	546	630	759	595	11	10	10	9	14	10
175	Carpentry and floor work:												
1751	Carpentry -----	1 685	6 349	5 846	6 359	6 919	6 271	3	4	5	4	4	4
1752	Floor laying and other floor work --	365	1 504	1 495	1 509	1 591	1 420	4	4	4	4	5	4
1761	Roofing, siding, and sheet metal work -----	1 271	7 051	5 658	6 879	8 263	7 405	3	3	4	3	3	3
1771	Concrete work -----	1 159	8 263	5 567	8 873	9 670	8 943	3	2	3	3	3	3
1781	Water well drilling -----	105	336	319	328	360	339	11	9	9	8	9	9
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	147	2 297	2 167	2 303	2 387	2 332	9	2	2	3	2	3
1793	Glass and glazing work -----	226	867	783	835	941	908	8	8	7	8	10	8
1794	Excavation work -----	798	3 166	2 673	3 258	3 631	3 101	6	5	6	5	5	5
1795	Wrecking and demolition work -----	49	820	727	811	896	847	22	4	3	4	4	4
1796	Installing building equipment, n.e.c. -----	178	3 740	3 756	3 124	3 737	4 342	7	2	2	2	2	2
1799	Special trade contractors, n.e.c. ----	942	5 869	4 934	5 810	6 539	6 192	6	3	4	4	4	3

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.2	26.1	152.0	.226	.335	.261	.255	.014
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.8	18.2	170.0	.146	.387	.282	.027	.007
1522	Other residential buildings -----	7.4	26.3	206.1	.180	.253	.475	.031	.009
1531	Operative builders -----	6.0	30.5	897.4	.073	.320	.403	.004	.005
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	13.6	27.9	230.9	.170	.280	.418	.093	.014
1542	Nonresidential buildings, n.e.c. -----	13.2	28.4	322.1	.133	.218	.587	.065	.007
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	28.5	33.3	201.3	.203	.469	.205	.208	.020
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	30.1	35.8	215.2	.220	.334	.223	.158	.015
1623	Water, sewer, and utility lines -----	19.0	28.8	131.3	.270	.319	.120	.154	.032
1629	Heavy construction, n.e.c. -----	17.9	41.5	247.3	.237	.252	.368	.103	.025
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.9	26.6	123.4	.291	.382	.125	.420	.014
1721	Painting and paper hanging -----	4.8	19.2	66.6	.349	.269	.066	.467	.019
1731	Electrical work -----	9.8	29.0	104.9	.357	.376	.056	.516	.011
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.6	20.2	67.3	.340	.322	.052	.661	.012
1742	Plastering, drywall, and insulation work -----	9.9	23.2	83.1	.341	.354	.082	.869	.013
1743	Terrazzo, tile, marble, and mosaic work -----	5.2	23.4	90.2	.317	.421	.027	.662	.008
175	Carpentry and floor work:								
1751	Carpentry -----	4.7	18.4	84.2	.270	.345	.153	.488	.008
1752	Floor laying and other floor work -----	5.9	23.5	131.9	.255	.444	.083	.590	.014
1761	Roofing, siding, and sheet metal work -----	7.1	22.7	104.7	.277	.406	.079	.308	.016
1771	Concrete work -----	8.4	23.3	97.7	.281	.435	.092	.594	.015
1781	Water well drilling -----	4.2	25.1	119.9	.278	.356	.027	.152	.020
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	18.6	26.8	89.9	.354	.346	.113	.698	.029
1793	Glass and glazing work -----	5.9	26.0	135.1	.295	.481	.047	.792	.018
1794	Excavation work -----	4.9	22.5	105.9	.264	.299	.103	.601	.038
1795	Wrecking and demolition work -----	20.9	20.0	87.7	.285	.253	.055	.298	.016
1796	Installing building equipment, n.e.c. -----	26.1	26.2	87.3	.373	.249	.049	.264	.017
1799	Special trade contractors, n.e.c. -----	8.3	22.4	87.6	.342	.370	.059	.349	.023

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CINCINNATI-HAMILTON, OH-KY-IN CMSA											
15,16,17	Construction industries	4 374	40 410	1 016 316	4 615 778	3 394 346	1 905 131	1 571 074	1 221 432	70 455	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	674	2 936	52 646	473 452	342 687	161 758	183 863	130 766	2 798	6	8
1522	Other residential buildings	15	261	5 372	31 117	19 902	11 301	9 188	11 215	(D)	2	(Z)
1531	Operative builders	195	1 719	60 376	731 815	410 518	176 046	267 361	321 298	5 112	6	9
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	62	1 428	39 777	174 437	105 439	66 765	42 301	68 998	977	6	6
1542	Nonresidential buildings, n.e.c.	221	3 042	83 095	681 498	250 959	104 022	155 167	430 539	11 618	5	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	62	2 068	61 443	313 630	249 276	147 296	105 262	64 355	9 978	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	50	1 557	40 080	129 522	112 725	76 632	38 414	16 797	5 991	2	2
1629	Heavy construction, n.e.c.	50	1 006	31 507	116 217	103 463	68 354	36 554	12 755	3 056	3	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	612	5 896	160 380	537 601	475 109	275 699	205 522	62 492	7 404	2	2
1721	Painting and paper hanging.....	272	1 318	23 343	60 597	57 864	42 903	15 424	2 733	546	10	7
1731	Electrical work	380	3 818	101 957	277 207	264 496	161 367	107 060	12 711	2 578	3	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work.....	201	1 308	25 703	61 585	59 417	42 161	17 406	2 168	1 259	9	8
1742	Plastering, drywall, and insulation work	147	1 681	36 583	103 490	95 216	58 173	37 328	8 275	1 131	7	5
1743	Terrazzo, tile, marble, and mosaic work	54	323	6 761	19 843	(D)	11 503	7 933	(D)	(D)	18	(D)
175	Carpentry and floor work:											
1751	Carpentry	389	1 816	34 603	108 984	94 033	59 790	36 472	14 951	790	8	9
1752	Floor laying and other floor work	64	558	12 793	51 616	47 484	23 749	25 022	4 133	657	4	1
1761	Roofing, siding, and sheet metal work	218	1 649	37 422	121 358	113 220	68 132	47 091	8 138	1 583	6	4
1771	Concrete work	245	3 228	84 879	270 597	242 803	115 021	129 839	27 794	6 081	4	3
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	36	480	13 526	31 725	30 273	24 611	5 674	(S)	674	5	5
1793	Glass and glazing work	53	380	9 113	38 143	34 481	15 041	19 610	3 661	985	14	8
1794	Excavation work	132	766	16 284	59 281	54 713	41 297	13 919	4 568	2 847	9	9
1795	Wrecking and demolition work	9	106	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c.	35	1 216	32 911	78 533	75 957	58 024	18 641	2 576	1 050	2	3
1799	Special trade contractors, n.e.c.	190	1 823	42 053	129 232	120 921	84 306	43 079	8 312	2 293	7	7
	Cincinnati, OH-KY-IN PMSA											
15,16,17	Construction industries	3 644	33 505	827 482	3 806 813	2 743 906	1 550 055	1 267 287	1 062 907	59 338	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	581	2 666	46 772	416 785	300 528	143 587	159 844	116 257	2 385	7	9
1522	Other residential buildings	11	(D)	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1531	Operative builders	157	1 471	54 014	567 594	306 784	132 531	207 138	260 810	4 795	6	8
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	53	1 277	34 054	146 688	90 218	56 523	36 313	56 470	(D)	6	7
1542	Nonresidential buildings, n.e.c.	197	2 838	76 223	646 252	228 961	88 049	(D)	417 290	11 371	6	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	50	1 722	50 765	267 174	212 764	121 614	93 277	54 411	8 099	5	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	38	1 217	32 035	98 430	(D)	58 445	30 941	(D)	4 837	3	(D)
1629	Heavy construction, n.e.c.	39	888	(D)	105 821	95 212	62 453	34 204	10 610	2 819	3	2

OH-14 OHIO

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.											
	Cincinnati, OH—KY—IN PMSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	495	5 163	142 171	477 194	420 558	243 122	182 199	56 636	6 915	3	2
1721	Painting and paper hanging	240	1 147	19 624	50 904	48 380	35 726	13 116	2 524	440	12	8
1731	Electrical work	308	3 292	87 203	238 246	226 139	138 839	90 175	12 107	2 435	3	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	173	1 051	20 198	48 495	(D)	33 224	13 398	(D)	1 046	11	(D)
1742	Plastering, drywall, and insulation work	111	1 264	29 359	80 309	74 785	46 736	28 203	5 525	585	7	5
1743	Terrazzo, tile, marble, and mosaic work	43	260	5 605	(D)	16 576	(D)	6 759	(D)	(D)	15	14
175	Carpentry and floor work:											
1751	Carpentry	334	1 579	30 880	96 520	83 195	53 278	32 138	13 325	626	8	10
1752	Floor laying and other floor work	53	492	12 025	49 022	(D)	22 208	23 772	(D)	569	6	(D)
1761	Roofing, siding, and sheet metal work	185	1 432	31 933	102 335	94 224	58 339	37 854	8 111	1 458	7	5
1771	Concrete work	196	1 625	(D)	(D)	(D)	59 706	(D)	(D)	(D)	8	(D)
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	29	278	7 581	19 178	17 940	15 233	(S)	(S)	(D)	9	8
1793	Glass and glazing work	44	338	8 076	35 226	31 596	13 510	18 257	3 630	(D)	14	7
1794	Excavation work	108	615	12 608	47 903	43 866	33 120	11 168	4 037	2 109	11	11
1795	Wrecking and demolition work	9	106	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c.	31	(D)	(D)	(D)	(D)	(D)	17 421	(D)	1 047	(D)	(D)
1799	Special trade contractors, n.e.c.	156	1 537	35 576	106 670	100 420	67 595	38 135	6 250	(D)	7	8
	Hamilton—Middletown, OH PMSA											
15,16,17	Construction industries	729	6 905	188 834	808 964	650 440	355 076	303 787	158 524	11 117	2	5
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	93	271	(S)	56 667	(S)	(S)	24 019	14 509	(S)	17	(S)
1522	Other residential buildings	4	(D)	749	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1531	Operative builders	39	248	6 362	164 222	103 734	43 515	60 224	60 488	*317	26	29
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	9	150	5 723	27 750	15 221	10 243	5 988	12 529	(D)	9	7
1542	Nonresidential buildings, n.e.c.	(S)	204	6 872	35 247	21 998	15 973	(D)	13 249	247	8	11
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	12	(S)	(S)	(S)	36 512	(S)	11 985	(S)	1 879	(S)	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1623	Water, sewer, and utility lines	12	340	8 045	31 092	(D)	18 187	7 473	(D)	1 154	4	(D)
1629	Heavy construction, n.e.c.	*11	118	(D)	10 396	8 251	5 901	2 350	2 145	*237	7	8
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	117	733	18 209	60 407	54 550	32 578	23 323	5 856	490	8	9
1721	Painting and paper hanging	32	171	3 719	9 693	9 484	7 177	2 308	*209	106	25	15
1731	Electrical work	(S)	525	14 754	38 961	38 357	22 529	16 885	604	143	5	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	28	257	5 505	13 090	(D)	8 937	4 007	(D)	213	9	(D)
1742	Plastering, drywall, and insulation work	36	418	7 224	23 181	20 431	11 437	9 125	*2 750	545	24	20
1743	Terrazzo, tile, marble, and mosaic work	12	*63	*1 157	(D)	(D)	(D)	*1 174	(D)	(D)	68	(D)
175	Carpentry and floor work:											
1751	Carpentry	55	237	3 723	12 464	10 838	6 512	4 335	1 626	165	18	19
1752	Floor laying and other floor work	*11	*66	*768	*2 594	(D)	*1 541	*1 250	(D)	(S)	67	(D)
1761	Roofing, siding, and sheet metal work	33	217	5 489	19 023	18 996	9 793	9 237	27	125	8	1

CONSTRUCTION—GEOGRAPHIC AREA SERIES

OHIO OH—15

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CINCINNATI-HAMILTON, OH-KY-IN CMSA—Con.											
	Hamilton-Middletown, OH PMSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1771	Concrete work	49	1 603	(D)	(D)	(D)	55 315	(D)	(D)	(D)	3	(D)
1781	Water well drilling	—	—	—	—	—	—	—	—	—	—	—
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	7	202	5 945	12 547	12 333	9 378	2 955	214	(D)	(Z)	(Z)
1793	Glass and glazing work	*9	*42	*1 037	*2 917	*2 885	*1 531	*1 354	(S)	(D)	60	54
1794	Excavation work	24	151	3 676	11 378	10 847	8 177	(S)	*531	738	18	13
1795	Wrecking and demolition work	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c.	5	(D)	(D)	(D)	(D)	(D)	1 220	(D)	(S)	(D)	(D)
1799	Special trade contractors, n.e.c.	34	286	6 477	22 562	20 500	16 711	4 944	2 062	(D)	14	13
	CLEVELAND-AKRON, OH CMSA											
15,16,17	Construction industries	6 239	53 328	1 556 441	6 843 617	4 795 471	3 002 804	1 997 121	2 048 146	103 597	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 040	3 929	80 590	562 458	372 547	184 066	200 935	189 911	(S)	6	7
1522	Other residential buildings	74	418	10 614	56 625	(D)	22 223	11 002	(D)	377	25	(D)
1531	Operative builders	170	1 028	29 665	383 928	229 655	155 086	83 193	154 273	2 824	10	11
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	94	1 033	32 463	205 147	(D)	66 176	55 811	(D)	1 449	9	(D)
1542	Nonresidential buildings, n.e.c.	351	4 345	126 571	1 019 420	367 597	177 350	207 447	651 823	9 671	3	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	80	2 356	83 905	402 788	307 018	151 712	160 439	95 770	17 111	2	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	13	637	26 094	127 522	91 985	49 876	42 749	35 537	3 221	2	2
1623	Water, sewer, and utility lines	116	1 488	47 206	207 049	177 913	110 212	68 504	29 136	11 360	9	13
1629	Heavy construction, n.e.c.	153	5 466	287 381	1 189 293	(D)	587 562	198 824	(D)	12 940	2	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	848	6 995	193 316	699 042	596 709	336 200	268 247	102 333	10 936	3	3
1721	Painting and paper hanging	404	1 823	37 374	99 537	92 097	65 564	26 553	7 440	1 895	6	4
1731	Electrical work	508	4 770	149 275	403 215	384 491	242 060	148 910	18 724	4 593	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	295	2 064	47 592	156 122	147 665	97 274	51 255	8 457	1 553	6	11
1742	Plastering, drywall, and insulation work	187	1 689	45 436	144 196	133 408	82 619	52 350	10 788	1 046	7	5
1743	Terrazzo, tile, marble, and mosaic work	36	170	4 354	(D)	(D)	6 849	5 228	*186	239	14	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	2 013	41 971	133 315	116 350	75 829	43 046	16 964	996	9	8
1752	Floor laying and other floor work	118	654	15 095	48 323	43 827	28 829	17 828	4 496	552	9	8
1761	Roofing, siding, and sheet metal work	386	2 415	56 462	233 589	206 019	115 654	93 401	27 570	3 049	5	6
1771	Concrete work	338	2 664	61 139	235 649	204 326	118 036	87 117	31 324	4 017	4	4
1781	Water well drilling	(S)	(S)	(S)	(D)	(D)	(S)	(S)	(S)	(D)	(S)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	40	1 262	30 330	73 326	65 953	44 312	27 634	7 374	1 642	2	1
1793	Glass and glazing work	72	395	11 834	35 324	34 069	20 199	14 965	*1 255	159	12	13
1794	Excavation work	196	1 371	32 244	111 220	94 643	70 554	26 143	16 578	5 100	12	7
1795	Wrecking and demolition work	*15	219	3 225	19 913	19 004	13 581	5 427	909	(D)	14	10
1796	Installing building equipment, n.e.c.	36	960	23 740	63 740	60 973	45 679	15 771	2 767	1 123	(Z)	(Z)
1799	Special trade contractors, n.e.c.	249	3 104	77 332	215 835	205 788	132 378	82 504	10 047	3 931	4	4

OH-16 OHIO

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CLEVELAND-AKRON, OH CMSA—Con.											
	Akron, OH PMSA											
15,16,17	Construction industries -----	1 445	11 631	345 527	1 333 817	1 058 899	697 562	383 601	274 918	20 154	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	229	864	17 202	117 935	77 295	40 518	38 164	40 640	(S)	12	13
1522	Other residential buildings -----	*25	*140	*3 180	*22 952	(D)	*9 820	*2 604	(D)	*297	51	(D)
1531	Operative builders -----	35	(S)	(S)	104 878	69 710	49 788	22 514	35 168	338	(S)	23
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	30	255	8 722	51 625	35 096	18 262	18 969	16 529	625	17	24
1542	Nonresidential buildings, n.e.c. -----	66	612	20 775	99 574	51 026	36 539	17 972	(S)	958	15	13
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	12	464	17 358	85 327	65 991	36 893	29 329	19 336	3 719	4	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	4	71	2 718	12 805	(D)	8 808	2 443	(D)	(D)	10	(D)
1623	Water, sewer, and utility lines -----	33	323	7 843	33 343	29 380	21 739	8 298	3 963	786	10	12
1629	Heavy construction, n.e.c. -----	42	1 844	88 998	240 833	204 514	165 778	38 790	36 319	2 036	3	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning -----	155	1 234	34 987	137 709	110 727	59 689	51 144	26 982	2 114	8	6
1721	Painting and paper hanging -----	(S)	339	6 031	17 960	16 244	10 359	5 905	1 715	(S)	13	11
1731	Electrical work -----	118	1 061	31 800	98 108	92 500	55 256	37 504	5 608	2 367	6	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work -----	102	484	(S)	31 975	30 317	19 493	10 879	(S)	456	13	14
1742	Plastering, drywall, and insulation work -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	185	(S)	(S)
1743	Terrazzo, tile, marble, and mosaic work -----	*14	*53	*1 397	(D)	(D)	*2 153	*1 382	(S)	*183	43	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	103	386	6 267	(S)	(S)	(S)	8 993	2 705	(S)	30	(S)
1752	Floor laying and other floor work -----	22	160	2 632	7 958	7 400	4 995	3 006	*558	63	20	14
1761	Roofing, siding, and sheet metal work -----	80	449	9 641	43 072	35 931	23 433	12 498	7 141	(S)	14	16
1771	Concrete work -----	93	451	8 106	31 255	27 905	16 295	11 719	3 350	(S)	11	5
1781	Water well drilling -----	9	(D)	(D)	(D)	(D)	(D)	(S)	30	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	(S)	238	8 162	25 337	20 128	10 152	13 061	5 210	453	3	2
1793	Glass and glazing work -----	10	42	1 190	4 062	3 935	2 365	1 960	*127	34	5	8
1794	Excavation work -----	40	247	5 186	21 921	19 386	12 743	6 643	2 535	2 241	21	21
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	5	(D)	(D)	4 927	(D)	(D)	850	(D)	13	(D)	(D)
1799	Special trade contractors, n.e.c. -----	77	1 194	36 017	88 175	84 658	62 395	29 163	*3 517	1 252	6	5
	Cleveland-Lorain-Elyria, OH PMSA											
15,16,17	Construction industries -----	4 794	41 697	1 210 914	5 509 800	3 736 572	2 305 242	1 613 520	1 773 228	83 443	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	811	3 065	63 388	444 522	295 252	143 549	162 770	149 271	2 789	7	9
1522	Other residential buildings -----	(S)	277	7 434	33 674	18 439	12 403	8 398	15 235	*80	27	24
1531	Operative builders -----	135	777	20 846	279 050	159 944	105 298	60 680	119 106	2 486	12	13
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	64	777	23 741	153 522	(D)	47 915	36 841	(D)	824	10	(D)
1542	Nonresidential buildings, n.e.c. -----	285	3 733	105 796	919 845	316 570	140 811	189 475	603 275	8 714	3	4

CONSTRUCTION—GEOGRAPHIC AREA SERIES

OHIO OH-17

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16,17 16	CLEVELAND-AKRON, OH CMSA—Con.											
	Cleveland-Lorain-Elyria, OH PMSA—Con.											
	Construction industries—Con.											
	Heavy construction other than building construction—contractors:											
	1611 Highway and street construction	68	1 892	66 546	317 461	241 027	114 819	131 110	76 434	13 392	2	3
	162 Heavy construction, except highway:											
	1622 Bridge, tunnel, and elevated highway construction	9	566	23 376	114 717	(D)	41 068	40 306	(D)	(D)	2	(D)
	1623 Water, sewer, and utility lines	83	1 165	39 363	173 706	148 532	88 473	60 206	25 174	10 573	11	16
	1629 Heavy construction, n.e.c.	111	3 621	198 382	948 460	(D)	421 784	160 034	(D)	10 903	3	(D)
	17 Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning	693	5 761	158 329	561 333	485 982	276 511	217 103	75 352	8 822	3	3
	1721 Painting and paper hanging	317	1 485	31 343	81 577	75 852	55 205	20 648	5 725	1 620	7	5
	1731 Electrical work	390	3 709	117 475	305 108	291 991	186 805	111 407	13 117	2 226	3	3
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work	193	1 580	38 117	124 147	117 349	77 780	40 375	6 799	1 096	6	13
	1742 Plastering, drywall, and insulation work	147	1 400	39 075	123 118	113 268	71 335	43 476	9 850	861	8	6
	1743 Terrazzo, tile, marble, and mosaic work	22	(S)	2 958	(D)	(D)	(S)	3 846	102	(S)	(S)	(D)
	175 Carpentry and floor work:											
	1751 Carpentry	(S)	1 627	35 704	108 370	94 111	62 543	34 053	14 259	920	8	9
	1752 Floor laying and other floor work	96	493	12 463	40 364	36 427	23 834	14 823	3 937	489	11	9
	1761 Roofing, siding, and sheet metal work	306	1 966	46 821	190 516	170 088	92 221	80 903	20 428	2 989	6	7
	1771 Concrete work	245	2 213	53 033	204 394	176 420	101 741	75 398	27 974	3 540	5	4
	1781 Water well drilling	(S)	(D)	(D)	(D)	(D)	(D)	(S)	(S)	(D)	(D)	(D)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection	28	1 024	22 168	47 989	45 825	34 160	14 573	2 164	1 188	2	1
	1793 Glass and glazing work	62	353	10 644	31 262	30 134	17 834	13 005	*1 128	125	14	15
	1794 Excavation work	156	1 124	27 058	89 299	75 257	57 811	19 500	14 043	2 858	14	7
	1795 Wrecking and demolition work	*15	219	3 225	19 913	19 004	13 581	5 427	909	(D)	14	10
	1796 Installing building equipment, n.e.c.	31	(D)	(D)	58 813	(D)	(D)	14 921	(D)	1 110	(D)	(D)
	1799 Special trade contractors, n.e.c.	172	1 909	41 315	127 659	121 129	69 983	53 341	6 530	2 679	6	7
15,16,17 15	COLUMBUS, OH MSA											
	Construction industries	2 820	27 675	720 067	3 376 500	2 390 325	1 259 450	1 208 798	986 174	46 425	1	1
	Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses	449	1 794	34 025	215 351	149 062	87 742	67 314	66 289	(S)	8	9
	1522 Other residential buildings	41	465	17 267	74 394	32 040	23 409	14 083	42 354	389	10	12
	1531 Operative builders	76	899	30 182	459 613	252 052	108 924	159 165	207 560	1 385	7	6
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses	40	532	12 436	106 487	58 707	27 896	34 697	47 780	1 156	12	20
	1542 Nonresidential buildings, n.e.c.	151	1 945	60 262	500 053	177 704	80 794	103 032	322 349	2 418	6	6
	16 Heavy construction other than building construction—contractors:											
	1611 Highway and street construction	47	1 266	46 095	203 567	165 982	58 846	110 557	37 585	6 025	3	3
	162 Heavy construction, except highway:											
	1622 Bridge, tunnel, and elevated highway construction	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1623 Water, sewer, and utility lines	61	1 049	27 050	109 049	96 443	62 958	33 955	(S)	4 912	7	8
	1629 Heavy construction, n.e.c.	(S)	1 063	37 180	209 252	(D)	(S)	130 338	(D)	6 963	9	(D)

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	COLUMBUS, OH MSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	347	4 053	112 605	372 599	331 860	190 188	145 079	40 740	3 873	3	3
1721	Painting and paper hanging	196	1 078	19 445	54 633	46 941	34 695	14 890	7 692	1 137	7	6
1731	Electrical work	239	3 182	94 433	265 651	243 290	148 219	96 741	22 361	2 784	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	143	1 116	22 219	65 316	61 279	36 903	24 674	4 037	813	7	6
1742	Plastering, drywall, and insulation work	(S)	1 389	33 073	87 316	81 879	55 584	28 062	5 438	1 114	6	4
1743	Terrazzo, tile, marble, and mosaic work	(S)	(D)	(D)	6 852	6 549	(D)	(D)	303	97	(D)	3
175	Carpentry and floor work:											
1751	Carpentry	(S)	1 136	22 097	95 419	71 630	44 648	30 624	*23 789	1 098	8	9
1752	Floor laying and other floor work	42	326	(S)	43 046	38 241	(S)	18 148	(S)	463	3	5
1761	Roofing, siding, and sheet metal work	145	1 395	33 981	110 026	102 775	67 076	42 208	7 252	1 406	8	8
1771	Concrete work	159	1 440	31 006	109 376	102 499	58 786	44 849	6 877	3 746	5	5
1781	Water well drilling	*8	101	3 265	10 725	10 011	6 647	3 364	714	(D)	11	14
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	19	230	6 994	28 862	26 399	14 444	14 863	2 464	141	8	8
1793	Glass and glazing work	34	180	3 681	11 685	11 469	5 280	6 322	*216	81	24	16
1794	Excavation work	66	470	10 735	41 347	38 115	18 565	19 607	3 233	1 547	17	14
1795	Wrecking and demolition work	*15	90	2 704	(D)	(D)	5 481	322	(D)	(D)	8	(D)
1796	Installing building equipment, n.e.c.	15	1 174	19 921	77 278	(D)	49 972	23 580	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c.	128	993	19 163	63 159	58 641	39 353	21 649	4 518	2 389	13	12
	DAYTON-SPRINGFIELD, OH MSA											
15,16,17	Construction industries	1 803	14 720	356 206	1 652 610	1 273 689	762 794	545 591	378 921	21 991	2	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	311	1 426	25 624	125 625	88 587	34 387	54 667	37 039	1 613	21	13
1522	Other residential buildings	*13	74	(D)	(D)	(D)	(D)	2 026	(D)	(D)	10	(D)
1531	Operative builders	51	337	12 820	156 984	114 529	70 120	51 751	42 455	114	20	28
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	30	479	9 473	83 057	48 311	24 517	24 415	34 747	433	16	10
1542	Nonresidential buildings, n.e.c.	78	1 348	40 332	390 523	222 761	145 425	79 318	167 762	1 743	6	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	37	446	12 330	59 771	45 336	29 083	18 651	14 435	2 817	6	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	17	332	8 349	34 012	29 598	19 709	10 008	4 414	955	11	8
1629	Heavy construction, n.e.c.	24	403	9 030	54 477	42 375	20 380	22 006	12 102	2 740	9	18
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	272	2 473	66 318	205 966	187 308	104 292	85 364	18 658	2 520	3	3
1721	Painting and paper hanging	118	665	11 466	29 722	27 121	20 866	7 679	*2 601	(S)	14	14
1731	Electrical work	164	1 610	46 082	137 611	129 462	81 705	56 922	8 149	3 046	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	406	9 859	24 439	23 399	17 123	6 305	1 040	(D)	14	10
1742	Plastering, drywall, and insulation work	64	847	17 535	49 645	46 284	30 678	18 650	3 361	935	15	12
1743	Terrazzo, tile, marble, and mosaic work	(S)	76	1 490	5 642	5 443	2 663	2 780	199	(D)	20	11
175	Carpentry and floor work:											
1751	Carpentry	137	796	12 637	43 137	38 214	24 996	13 455	4 923	706	17	24
1752	Floor laying and other floor work	28	185	4 067	19 443	18 650	7 872	10 878	793	205	3	3
1761	Roofing, siding, and sheet metal work	114	942	21 985	63 790	61 135	36 856	26 592	2 655	803	9	8
1771	Concrete work	102	588	11 512	42 267	40 262	20 107	20 155	2 005	702	12	9

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	DAYTON-SPRINGFIELD, OH MSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1781	Water well drilling -----	(S)	58	1 435	(D)	(D)	2 638	(D)	(D)	(D)	10	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	9	142	2 395	9 559	(D)	3 618	(D)	(D)	85	(Z)	(D)
1793	Glass and glazing work -----	(S)	96	2 293	6 278	6 132	4 027	3 023	(S)	57	1	3
1794	Excavation work -----	39	350	8 940	34 737	30 927	20 544	10 397	3 810	1 454	7	5
1795	Wrecking and demolition work -----	*3	(S)	(D)	(S)	(S)	(D)	*410	(S)	—	(S)	(S)
1796	Installing building equipment, n.e.c. -	28	235	7 950	23 864	(D)	16 737	4 939	(D)	230	13	(D)
1799	Special trade contractors, n.e.c. ----	(S)	375	8 976	23 277	22 040	15 193	7 984	1 237	133	13	9
	TOLEDO, OH MSA											
15,16,17	Construction industries -----	1 229	12 804	357 920	1 443 111	1 077 502	628 147	486 554	365 609	14 825	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	215	982	17 919	98 295	73 118	38 494	36 156	25 177	857	11	9
1522	Other residential buildings -----	(S)	(S)	*2 171	*19 226	*14 872	*2 915	*12 846	*4 354	*171	(S)	49
1531	Operative builders -----	*21	114	2 714	20 879	(D)	8 454	7 805	(D)	(S)	14	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	9	560	(D)	(D)	88 842	48 484	(D)	(D)	(D)	4	2
1542	Nonresidential buildings, n.e.c. ----	43	683	24 137	210 627	59 607	(S)	62 824	151 019	(S)	8	7
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	24	758	19 218	93 129	76 209	57 251	32 001	16 920	1 328	3	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines -----	20	1 107	33 828	100 178	96 266	55 733	40 836	3 912	3 257	(Z)	(Z)
1629	Heavy construction, n.e.c. -----	22	599	18 180	66 764	56 103	32 248	24 379	10 662	2 134	4	3
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning -----	179	2 264	61 211	197 237	164 079	105 161	61 981	33 157	1 120	5	3
1721	Painting and paper hanging -----	54	331	6 309	18 101	17 463	12 076	5 481	637	205	18	16
1731	Electrical work -----	112	1 404	46 813	128 896	122 384	74 955	47 809	6 512	1 698	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work -----	50	215	5 334	13 394	(D)	8 286	4 310	(D)	*197	15	(D)
1742	Plastering, drywall, and insulation work -----	55	483	9 521	30 382	24 874	14 887	10 809	*5 508	67	9	12
1743	Terrazzo, tile, marble, and mosaic work -----	6	(D)	497	1 706	(D)	826	841	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	88	338	6 750	29 412	22 918	12 988	13 131	*6 494	102	14	22
1752	Floor laying and other floor work -----	24	145	3 255	11 348	11 226	6 195	5 366	(S)	*105	16	15
1761	Roofing, siding, and sheet metal work -----	(S)	694	17 361	64 597	61 990	39 511	23 129	(S)	(S)	8	10
1771	Concrete work -----	71	497	11 392	47 624	46 017	24 694	21 438	1 607	483	16	16
1781	Water well drilling -----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	6	119	5 426	(D)	(D)	6 853	2 966	(D)	(D)	(Z)	(D)
1793	Glass and glazing work -----	*14	*74	*2 030	(D)	(D)	*3 291	(D)	(D)	(D)	41	(D)
1794	Excavation work -----	45	144	3 222	13 526	12 202	8 361	3 853	1 324	*577	20	21
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c. -	14	729	(D)	65 963	(D)	50 103	12 295	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c. ----	54	411	9 601	24 996	23 973	16 205	11 561	1 024	346	15	16

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	YOUNGSTOWN–WARREN, OH MSA											
15,16, 17	Construction industries	1 284	9 877	238 267	965 323	754 839	472 183	335 409	210 484	14 093	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	246	869	16 386	112 692	88 044	43 237	47 311	24 648	(S)	14	11
1522	Other residential buildings	(S)	57	(D)	3 573	2 795	(D)	1 596	778	(D)	(Z)	(Z)
1531	Operative builders	34	167	3 939	36 428	23 821	7 707	18 968	12 607	339	30	25
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	42	227	5 939	21 950	16 107	10 013	6 292	5 843	508	31	17
1542	Nonresidential buildings, n.e.c.	70	1 786	40 449	199 468	93 766	80 007	47 071	105 702	664	3	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	22	427	12 169	48 972	41 068	18 921	26 196	7 904	1 934	8	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	7	197	4 406	14 356	11 625	7 327	4 516	2 731	208	(Z)	(Z)
1623	Water, sewer, and utility lines	16	321	12 655	41 044	34 215	26 001	8 286	6 829	769	5	5
1629	Heavy construction, n.e.c.	36	254	6 519	29 394	24 353	15 892	9 232	5 041	495	20	14
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	137	1 504	40 178	145 602	125 628	70 067	56 479	19 973	1 303	4	3
1721	Painting and paper hanging.....	91	465	12 310	54 117	52 108	36 213	15 908	*2 009	1 464	11	15
1731	Electrical work	(S)	821	25 106	71 395	66 754	40 676	27 667	4 641	523	4	5
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work.....	61	304	3 967	11 914	11 635	8 259	3 382	278	758	24	16
1742	Plastering, drywall, and insulation work	35	294	7 897	25 537	22 608	13 475	9 164	(S)	(S)	11	11
1743	Terrazzo, tile, marble, and mosaic work	*17	*89	*2 658	*9 169	*8 868	*5 260	*3 640	*301	(D)	42	52
175	Carpentry and floor work:											
1751	Carpentry	80	396	6 456	24 443	22 237	14 788	8 582	2 206	*124	14	13
1752	Floor laying and other floor work	16	(D)	1 144	5 478	5 437	3 273	2 180	*41	54	(D)	5
1761	Roofing, siding, and sheet metal work	(S)	398	8 224	26 391	25 989	16 134	11 748	402	384	12	10
1771	Concrete work	53	307	5 138	18 650	17 440	10 397	7 043	1 211	1 107	18	14
1781	Water well drilling	(S)	*28	*511	*2 062	*1 945	*1 081	(D)	*116	*175	55	50
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	4	32	1 158	(D)	(D)	1 686	(D)	(D)	(D)	36	(D)
1793	Glass and glazing work	11	72	2 000	5 647	(D)	3 773	3 131	(D)	(D)	15	(D)
1794	Excavation work.....	60	228	3 984	16 770	15 153	11 467	3 723	1 617	*893	23	25
1795	Wrecking and demolition work	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -	7	158	3 766	8 703	(D)	7 794	1 279	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c.	80	263	5 231	17 327	15 209	8 850	6 501	2 119	298	25	24

Contents

Wisconsin

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Wisconsin. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 35,757 establishments in this State operating in the construction industries. These establishments accounted for \$12.1 billion in total dollar value of business done.

Most of the 35,757 construction establishments were small. Of the total, 23,043 were nonemployers, and over half of the employer establishments had less than 5 employees. The 4,736 construction establishments with 5 employees or more, while representing only 13 percent of all establishments, accounted for more than 81 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$11.4 billion in total dollar value of business done. Of this amount, \$11.1 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$2.6 billion, leaving net value of construction work of \$8.5 billion. In addition, these establishments paid out \$4.1 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$5.1 billion. (See Introduction and appendixes for explanation of terms.)

There were 12,714 establishments with total employment averaging 96,781 during the year. Total payroll for 1992 was \$2.6 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 23,043 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$708 million. Most of these establishments, about 85 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

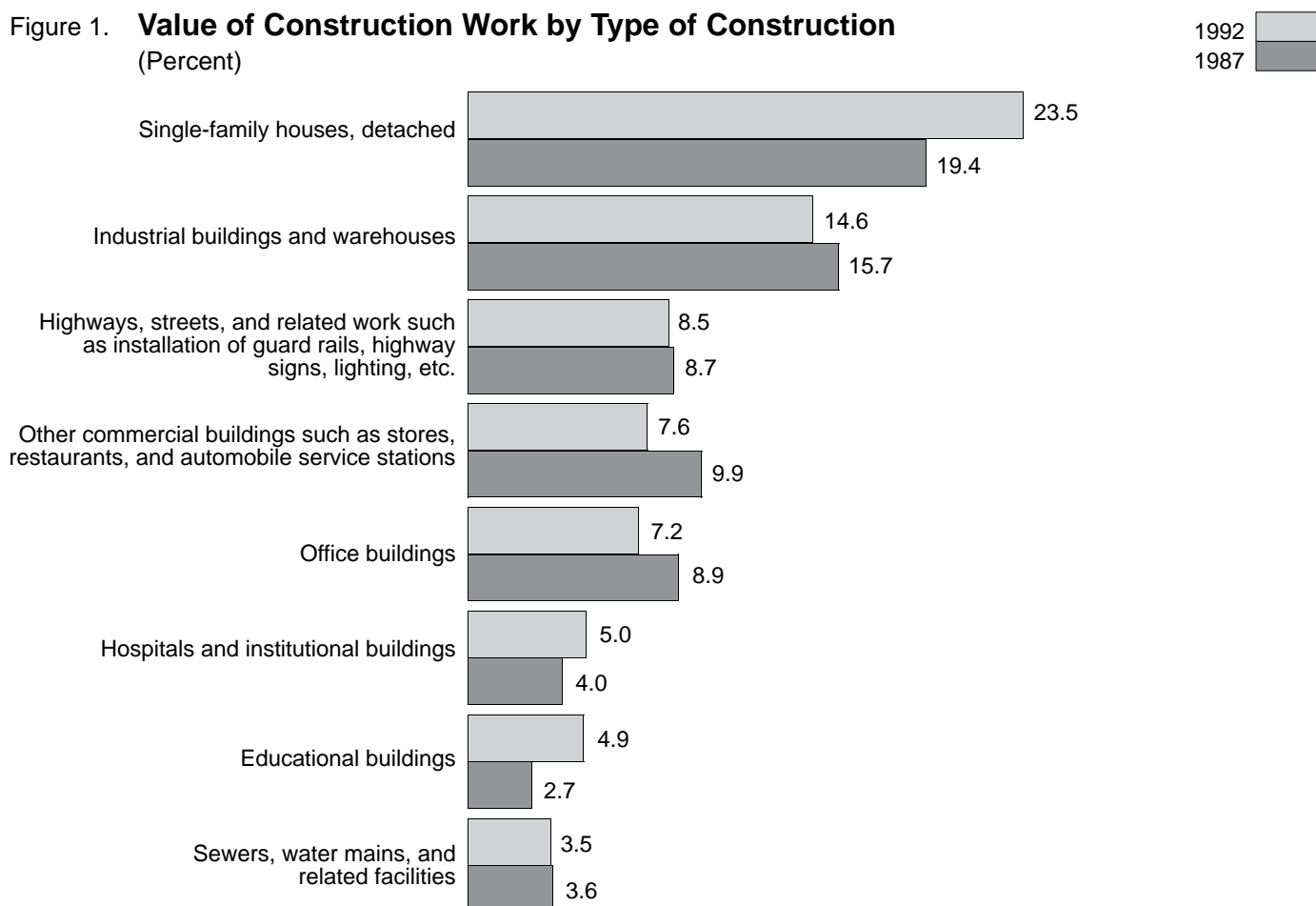


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

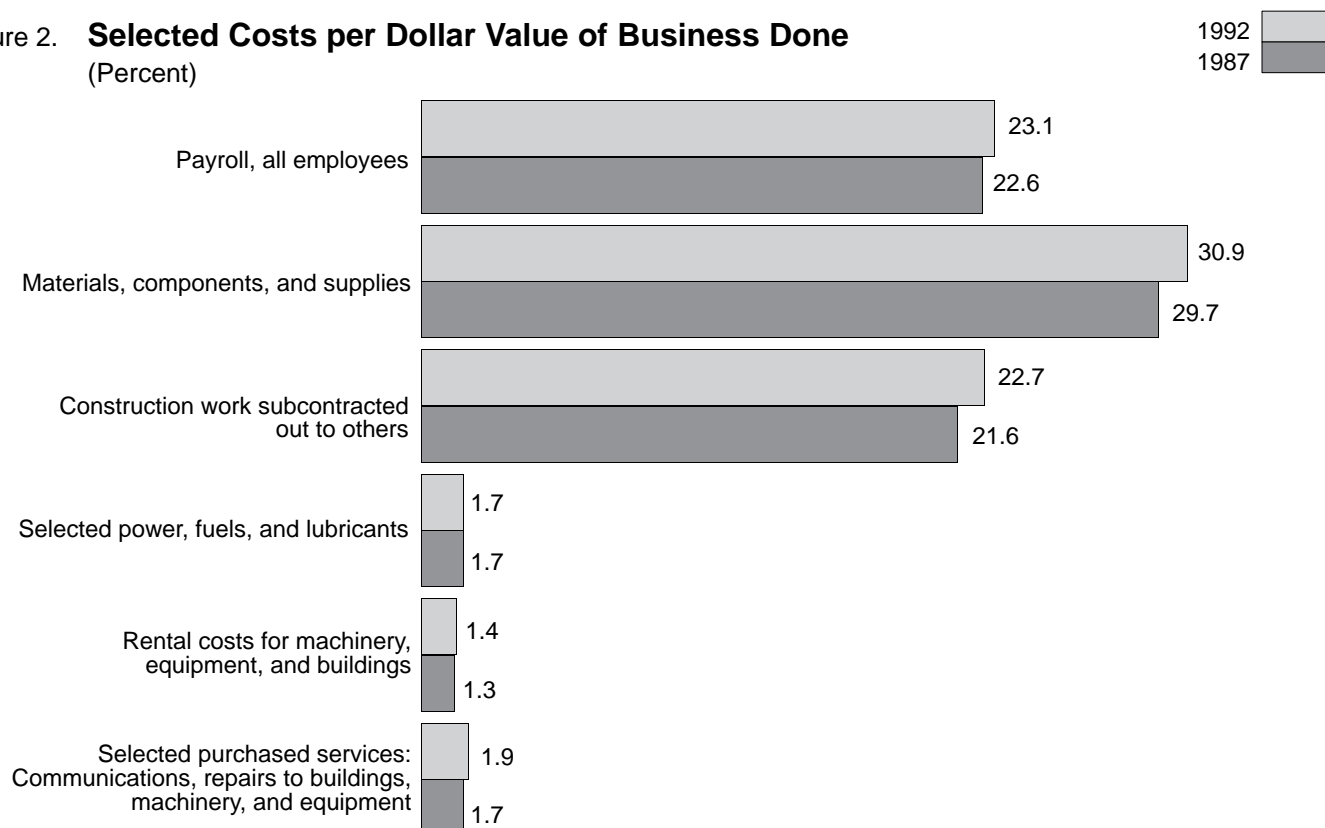


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	35 757	29 704	96 781	12 108 870	23 043	23 166	708 055	12 714	6 538	96 781	11 400 815	1	1
15	Building construction—General contractors and operative builders ----	6 599	4 922	25 279	4 543 317	3 156	3 100	234 591	3 443	1 822	25 279	4 308 726	1	2
16	Heavy construction other than building construction—contractors -----	875	430	12 062	2 170 975	220	206	5 826	655	224	12 062	2 165 149	2	1
17	Special trade contractors -----	28 283	24 353	59 440	5 394 578	19 667	19 860	467 638	8 616	4 493	59 440	4 926 940	1	1
1711	Plumbing, heating, and air-conditioning --	2 977	1 867	14 921	1 498 856	1 243	1 249	46 823	1 734	618	14 921	1 452 033	2	1
1731	Electrical work -----	2 323	1 591	9 932	879 232	1 254	1 242	32 472	1 069	349	9 932	846 760	2	1
	1987													
15, 16, 17	Construction industries² -----	34 069	27 094	77 419	8 701 940	23 338	23 351	952 393	10 731	3 743	77 419	7 749 547	1	1
15	Building construction—General contractors and operative builders ----	6 833	4 712	20 688	3 209 971	3 900	3 726	283 223	2 933	986	20 688	2 926 748	2	3
16	Heavy construction other than building construction—contractors -----	849	415	10 465	1 366 247	210	205	23 526	639	210	10 465	1 342 721	2	2
17	Special trade contractors -----	25 705	21 300	46 114	3 967 250	18 622	18 773	518 018	7 083	2 527	46 114	3 449 232	1	1
1711	Plumbing, heating, and air-conditioning --	2 877	1 797	11 208	1 029 137	1 326	1 322	57 604	1 551	475	11 208	971 533	2	2
1731	Electrical work -----	2 173	1 523	7 128	535 660	1 320	1 327	39 399	853	196	7 128	496 261	2	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	12 714	96 781	75 745	2 634 937	1 957 373	11 078 769	8 491 178	5 096 395
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	2 402	9 554	7 246	184 622	128 481	1 319 855	866 558	399 065
1522	Other residential buildings -----	158	1 118	843	25 083	17 881	155 174	95 779	43 145
1531	Operative builders -----	221	930	501	24 231	10 752	304 081	168 724	81 525
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	156	4 639	3 619	158 755	123 463	703 260	412 575	269 814
1542	Nonresidential buildings, n.e.c. -----	506	9 039	6 663	295 680	193 368	1 688 776	830 970	491 955
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	152	4 548	3 803	179 156	142 956	914 358	667 240	419 075
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	12	1 155	1 007	44 257	36 219	323 954	211 177	112 780
1623	Water, sewer, and utility lines -----	215	3 902	3 287	126 066	98 860	478 261	438 085	289 464
1629	Heavy construction, n.e.c. -----	276	2 457	1 892	76 132	57 090	365 917	254 439	165 916
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	1 734	14 921	11 119	437 937	321 278	1 428 177	1 326 527	812 310
1721	Painting and paper hanging -----	748	3 283	2 713	65 853	51 056	173 822	167 517	124 027
1731	Electrical work -----	1 069	9 932	7 957	298 815	235 483	834 393	803 649	485 555
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	531	3 471	3 003	80 216	68 190	246 941	237 964	149 591
1742	Plastering, drywall, and insulation work -----	441	3 856	3 203	92 553	72 076	273 405	260 526	164 408
1743	Terrazzo, tile, marble, and mosaic work -----	88	500	386	11 929	8 781	34 599	34 320	20 132
175	Carpentry and floor work:								
1751	Carpentry -----	1 086	3 994	3 241	77 005	61 061	295 295	258 939	149 480
1752	Floor laying and other floor work -----	321	1 223	920	26 297	19 207	98 575	93 334	52 541
1761	Roofing, siding, and sheet metal work -----	718	4 947	3 926	112 051	80 051	380 679	363 588	212 741
1771	Concrete work -----	719	4 614	3 807	106 456	80 775	383 970	363 352	211 449
1781	Water well drilling -----	137	642	446	14 022	9 813	61 952	60 198	33 900
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	78	889	739	27 738	21 846	76 432	73 677	53 879
1793	Glass and glazing work -----	59	786	497	20 960	11 278	59 981	58 846	41 712
1794	Excavation work -----	389	2 246	1 813	52 137	41 044	191 964	172 362	123 282
1795	Wrecking and demolition work -----	18	114	88	2 819	1 932	11 217	10 024	8 244
1796	Installing building equipment, n.e.c. -----	98	1 526	1 148	40 029	27 114	109 229	105 653	79 896
1799	Special trade contractors, n.e.c. -----	382	2 495	1 881	54 138	37 319	164 504	155 157	100 511

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
3 716 829	2 587 592	3 049 072	158 775	244 139	1 979 103	77 419	7 481 951	3 605 139	1	1	3	15, 16, 17
												15
501 902	453 297	41 476	8 450	16 299	105 286	7 893	(D)	276 405	4	5	10	152
55 629	59 395	4 603	935	*1 902	*22 488	1 694	266 351	76 619	15	17	44	1521
110 022	135 357	(S)	*1 205	*4 158	33 013	684	(D)	55 887	12	13	55	1531
160 553	290 685	55 115	3 434	5 680	86 383	2 830	369 335	134 820	3	2	11	154
398 576	857 806	78 122	10 703	19 939	157 098	7 587	1 174 550	436 955	2	2	3	1542
												16
319 938	247 118	306 308	29 953	34 240	379 937	4 381	662 689	314 077	2	1	5	1611
(D)	112 777	22 867	3 637	6 757	55 340	977	148 661	61 930	(Z)	(Z)	1	162
149 616	40 177	73 944	22 471	23 402	173 853	3 500	327 181	203 108	3	4	12	1622
96 917	111 478	95 243	12 417	18 393	132 483	1 607	173 335	92 049	7	7	24	1623
												17
538 073	101 650	681 884	17 018	26 425	179 486	11 208	943 910	514 494	2	1	10	1711
48 324	6 304	79 349	2 323	4 013	24 684	2 904	125 782	94 758	5	5	23	1721
330 460	(S)	338 436	8 657	13 153	91 300	7 128	483 991	294 711	2	1	10	1731
90 260	8 977	180 316	3 073	5 319	38 720	2 660	156 069	92 226	5	5	17	174
103 877	12 879	239 487	3 433	3 205	22 822	2 559	166 923	95 428	3	3	15	1741
14 697	(S)	31 832	277	854	4 144	359	27 262	14 426	13	8	26	1742
												175
112 653	36 356	100 613	2 000	4 638	29 201	2 567	163 947	81 410	5	5	18	1751
44 334	5 241	53 419	1 308	2 607	11 214	742	50 740	28 165	8	8	26	1752
157 345	17 092	149 113	5 285	7 125	65 129	4 317	284 358	158 898	3	3	13	1761
158 742	20 618	175 412	4 718	14 361	106 831	3 662	257 993	151 330	4	4	17	1771
26 554	1 754	7 476	852	*4 584	36 110	328	25 829	14 551	15	13	45	1781
												179
(D)	2 756	44 163	1 489	724	10 269	799	66 489	45 206	10	8	20	1791
28 544	1 135	44 659	1 409	750	8 024	816	55 149	33 857	5	5	25	1793
56 184	19 602	122 733	8 455	18 753	142 594	2 004	172 266	114 945	8	6	16	1794
1 895	1 193	555	434	1 021	5 990	136	5 479	4 927	3	4	(Z)	1795
30 031	3 576	44 640	1 611	2 665	27 475	1 797	223 149	115 496	5	4	3	1796
60 957	9 347	66 013	3 228	3 173	29 228	2 128	143 184	88 473	8	7	18	1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	12 714	10 731	10 055	11 016	1	1	2	2
Proprietors and working partners.....	6 538	3 743	3 858	5 806	2	4	4	4
All employees**	96 781	77 419	65 892	80 680	1	1	1	1
Construction workers:								
March.....	61 228	49 009	42 241	53 042	1	1	1	1
May	78 018	62 189	53 877	70 423	1	1	1	1
August	86 213	69 941	58 478	78 079	1	1	1	1
November	77 523	63 796	52 911	71 878	1	1	2	1
Average	75 745	61 234	52 996	68 415	1	1	1	1
Other employees:								
March.....	20 785	15 570	12 842	11 663	1	1	2	2
May	20 872	16 049	(NA)	(NA)	1	1	(NA)	(NA)
August	21 170	16 534	(NA)	(NA)	1	1	(NA)	(NA)
November	21 314	16 598	(NA)	(NA)	1	1	(NA)	(NA)
Average	21 035	16 188	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	2 634 937	1 750 847	1 218 540	1 117 593	(Z)	1	1	1
Payroll, construction workers	1 957 373	1 316 924	945 721	920 932	(Z)	1	1	1
Payroll, other employees	677 564	433 923	272 819	196 661	1	1	1	1
First-quarter payroll, all employees	529 388	347 320	248 844	204 377	1	1	1	1
Fringe benefits, all employees	739 421	439 900	218 534	211 139	1	1	1	1
Legally required expenditures	429 306	277 813	161 965	111 758	1	1	1	1
Voluntary expenditures	310 116	162 087	56 569	99 382	1	1	1	1
Dollar value of business done	11 400 815	7 749 547	4 499 025	4 362 260	1	1	1	1
Value of construction work	11 078 769	7 481 951	4 361 699	4 205 483	1	1	1	1
Value of construction work subcontracted in from others	3 049 072	1 622 570	923 855	960 195	2	2	2	1
Other business receipts	322 046	234 380	126 458	156 776	3	3	2	5
Net value of construction†	8 491 178	5 806 805	3 471 757	3 365 134	1	1	1	1
Value added††	5 096 395	3 605 139	2 091 361	1 916 136	1	1	1	1
Selected costs	6 304 420	4 111 193	2 396 796	2 403 249	1	2	1	1
Materials, components, and supplies	3 525 038	2 303 469	1 403 418	1 489 178	1	1	1	1
Construction work subcontracted out to others	2 587 592	1 675 146	889 942	840 349	1	3	1	2
Selected power, fuels, and lubricants	191 791	132 577	103 436	73 722	1	2	2	1
Electricity.....	23 635	15 078	11 080	7 596	3	2	2	2
Natural gas	11 412	6 290	5 896	4 406	3	2	4	3
Gasoline and diesel fuel	143 888	103 359	77 569	52 643	1	2	2	1
On highway use	97 639	68 744	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use	46 249	34 614	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases.....	12 855	7 848	8 889	9 079	3	3	2	3
Rental cost for machinery, equipment, and buildings	158 775	99 749	54 810	44 772	3	2	2	1
For machinery and equipment	105 869	64 993	38 431	35 551	4	3	2	1
For buildings.....	52 906	34 756	16 379	9 222	4	3	3	2
Selected purchased services	218 088	128 551	77 669	77 432	2	2	1	6
Communication services	54 768	28 534	20 814	18 269	4	2	2	8
Repairs to buildings and other structures	11 596	7 255	4 549	3 582	6	10	4	5
Repairs to machinery and equipment	151 724	92 760	52 306	55 582	2	2	2	7
Ownership of construction projects:								
Value of construction work	11 078 769	7 481 951	4 361 699	4 205 483	1	1	1	1
Government owned	2 719 702	1 503 252	989 178	710 781	1	2	3	1
Federal	438 495	427 980	(NA)	(NA)	3	3	(NA)	(NA)
State and local	2 281 208	1 075 272	(NA)	(NA)	2	2	(NA)	(NA)
Privately owned	8 359 067	5 978 699	3 372 520	3 494 702	2	2	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 812 923	1 091 416	2	2
Capital expenditures, other than land -----	244 139	162 187	3	3
New -----	182 441	120 299	4	3
Used -----	61 698	41 887	6	6
Retirements and disposition of depreciable assets -----	77 959	46 959	7	6
End-of-year gross book value of depreciable assets -----	1 979 103	1 206 644	2	2
Depreciation charges during year -----	212 408	131 259	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	244 632	195 587	8	3
Capital expenditures, other than land -----	20 571	21 283	11	8
New buildings and other structures -----	14 850	16 344	11	9
Used buildings and other structures -----	5 721	4 938	30	18
Retirements and disposition of depreciable assets -----	13 165	5 867	35	16
End-of-year gross book value of depreciable assets -----	252 038	211 003	6	3
Depreciation charges during year -----	16 643	13 901	6	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 568 292	895 829	2	2
Capital expenditures, other than land -----	223 568	140 903	3	3
New machinery and equipment, including automobiles and trucks -----	167 591	103 954	4	3
New automobiles and trucks, intended primarily for highway use -----	62 528	45 635	5	4
Used machinery and equipment, including automobiles and trucks -----	55 977	36 949	6	6
Retirements and disposition of depreciable assets -----	64 794	41 092	5	6
End-of-year gross book value of depreciable assets -----	1 727 065	995 640	2	2
Depreciation charges during year -----	195 765	117 358	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	12 714	1
Value of construction work	11 078 769	1
Establishments with inventories:		
Number	4 607	2
Value of construction work	6 369 358	1
Inventories ¹ :		
End of 1992, materials and supplies	166 596	4
End of 1991, materials and supplies	160 964	4
Establishments with no inventories:		
Number	4 751	2
Value of construction work	3 283 241	1
Establishments not reporting:		
Number	3 356	2
Value of construction work	1 426 170	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	12 714	7 979	2 546	1 271	692	147	59	18	2	1
All employees** -----	96 781	15 560	16 525	16 468	20 519	9 903	8 352	6 394	3 061	(D)
Payroll, all employees -----	2 634 937	268 202	340 784	417 335	613 940	334 437	306 036	241 752	112 451	(D)
Dollar value of business done -----	11 400 815	1 586 583	1 512 831	1 693 111	2 351 335	1 310 356	1 357 209	1 589 391	(D)	(D)
Value of construction work -----	11 078 769	1 564 423	1 463 068	1 652 406	2 292 169	1 251 858	1 327 034	1 527 811	(D)	(D)
Net value of construction work† -----	8 491 178	1 300 334	1 189 163	1 321 456	1 811 726	918 516	902 538	755 306	292 139	(D)
Value added†† -----	5 096 395	713 318	663 818	774 799	1 110 445	614 796	571 374	462 112	185 733	(D)
Cost of materials, components, supplies, and fuels -----	3 716 829	609 175	575 107	587 361	760 448	362 218	361 339	351 115	110 065	(D)
Cost of construction work subcontracted out to others -----	2 587 592	264 090	273 905	330 950	480 443	333 342	424 496	480 366	(D)	(D)
Rental cost for machinery, equipment, and buildings -----	158 775	13 448	20 007	25 605	30 060	16 930	27 373	25 352	(D)	(D)
Capital expenditures, other than land -----	244 139	39 673	39 778	42 083	49 408	21 301	24 332	27 564	(D)	(D)
End-of-year gross book value of depreciable assets -----	1 979 103	271 505	225 708	320 102	454 561	214 105	235 853	257 269	(D)	(D)
1987										
All employees** -----	77 419	13 914	14 935	13 268	15 107	8 409	7 666	4 117	(D)	—
Value of construction work -----	7 481 951	1 087 062	1 219 241	1 120 986	1 559 994	898 730	1 002 157	593 780	(D)	—
Value added†† -----	3 605 139	505 218	553 749	569 075	751 823	443 552	490 582	291 138	(D)	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	3	4	4	2	(Z)	(Z)	(Z)	(Z)	(D)
Net value of construction work† -----	1	4	5	3	1	(Z)	(Z)	(Z)	(Z)	(D)
Capital expenditures, other than land -----	3	10	13	10	3	(Z)	(Z)	(Z)	(D)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	12 714	(S)	(S)	1 570	3 545	2 570	1 594	1 190	423	196	149
All employees** -----	96 781	(S)	(S)	2 448	9 578	12 189	12 446	17 346	11 709	8 602	21 149
Payroll, all employees -----	2 634 937	(S)	(S)	28 746	146 755	226 488	278 743	466 648	362 632	301 615	812 614
Dollar value of business done -----	11 400 815	(S)	(S)	116 321	581 254	894 560	1 115 205	1 824 806	1 460 917	1 326 873	4 040 846
Value of construction work -----	11 078 769	(S)	(S)	114 504	576 914	880 329	1 083 793	1 787 440	1 424 810	1 269 716	3 901 465
Net value of construction work† -----	8 491 178	(S)	(S)	106 877	540 330	800 556	937 039	1 506 169	1 114 716	951 773	2 496 626
Value added†† -----	5 096 395	(S)	(S)	64 482	316 593	457 526	544 146	889 267	661 986	572 090	1 567 590
Cost of materials, components, supplies, and fuels -----	3 716 829	(S)	(S)	44 212	228 078	357 261	424 305	654 267	488 837	436 840	1 068 418
Cost of construction work subcontracted out to others -----	2 587 592	(S)	(S)	7 627	36 584	79 773	146 754	281 272	310 094	317 942	1 404 839
Rental cost for machinery, equipment, and buildings -----	158 775	(S)	(S)	1 465	5 671	11 351	18 225	26 128	17 543	15 854	62 171
Capital expenditures, other than land -----	244 139	(S)	(S)	4 052	17 495	27 424	32 275	46 275	29 154	20 478	65 750
End-of-year gross book value of depreciable assets -----	1 979 103	(S)	(S)	27 248	121 014	165 612	174 688	357 429	251 900	241 986	629 469
1987											
All employees** -----	77 419	(S)	(S)	3 124	10 220	9 846	11 002	11 802	10 118	7 562	12 354
Value of construction work -----	7 481 951	(S)	(S)	121 882	536 742	623 335	851 424	1 150 224	1 174 714	947 070	2 041 985
Value added†† -----	3 605 139	(S)	(S)	69 976	289 739	329 621	422 156	581 960	565 654	422 058	903 699
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	8	5	5	5	3	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	6	4	5	5	3	3	2	(Z)
Capital expenditures, other than land -----	3	(S)	(S)	19	12	16	13	10	4	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

WI-10 WISCONSIN

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	11 078 769	6 755 021	2 717 918	1 312 810	1	1	1	2
Building construction	8 218 231	5 133 745	2 077 558	1 006 929	1	1	2	2
Single-family houses	2 933 746	2 056 807	573 614	303 325	2	3	4	4
Single-family houses, detached	2 602 401	1 811 578	521 157	269 667	3	3	4	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	331 345	245 229	52 457	33 659	8	11	12	11
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	359 435	253 650	59 100	46 685	7	6	19	20
Other residential buildings, including hotels, motels, and tourist cabins	129 938	80 282	32 881	16 775	7	9	11	15
Office buildings	793 537	508 953	204 532	80 052	2	2	4	3
Other commercial buildings such as stores, restaurants, and automobile service stations	846 920	520 926	221 723	104 270	2	3	3	4
Industrial buildings and warehouses	1 618 138	829 750	482 933	305 456	1	1	2	2
Industrial buildings	1 358 103	660 138	414 643	283 322	1	1	2	3
Warehouses	260 035	169 611	68 290	22 134	2	3	3	5
Religious buildings	120 850	61 668	36 203	22 979	3	3	5	6
Educational buildings	543 003	323 722	169 778	49 504	2	1	3	6
Hospitals and institutional buildings	555 435	310 571	199 014	45 850	1	1	2	4
Farm buildings, nonresidential	112 892	76 625	19 509	16 758	10	13	18	12
Other nonresidential buildings	204 336	110 790	78 272	15 275	4	5	7	10
Nonbuilding construction	2 567 518	1 621 276	640 360	305 881	1	1	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	936 639	421 777	357 044	157 818	1	2	1	4
Private driveways and parking areas	125 347	73 599	29 746	22 001	6	6	10	9
Bridges, tunnels, and elevated highways	321 761	284 737	(D)	(D)	1	(Z)	(D)	(D)
Conservation and development construction	76 879	65 202	(D)	(D)	8	7	(D)	(D)
Power and communication transmission lines, towers, and related facilities	116 394	72 446	27 195	16 753	5	5	3	11
Sewers, water mains, and related facilities	392 788	287 170	64 977	40 642	6	6	12	13
Sewers, sewer lines, septic systems, and related facilities	261 216	196 037	44 381	20 797	6	6	11	13
Water mains and related facilities	131 572	91 132	20 595	19 845	9	8	15	15
Pipeline construction other than sewer or water lines	140 492	101 205	28 601	10 686	3	(Z)	1	31
Sewage treatment and water treatment plants	247 707	201 941	40 128	5 638	2	2	2	5
Other nonbuilding construction	209 511	113 200	53 800	42 511	4	5	5	6
Construction work, n.s.k.	293 021	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
1987								
Value of construction work	7 481 951	4 494 762	1 700 502	961 389	1	2	2	2
Building construction	5 536 209	3 483 178	1 337 933	715 098	2	2	3	2
Single-family houses	1 669 005	1 132 214	318 512	218 278	4	6	4	5
Single-family houses, detached	1 450 163	958 385	298 784	192 993	4	6	5	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	218 841	173 829	19 727	25 285	11	14	11	19
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	333 116	238 836	64 507	29 772	8	9	21	7
Other residential buildings, including hotels, motels, and tourist cabins	162 735	108 248	28 358	26 128	4	4	10	13
Office buildings	668 707	451 102	152 606	64 997	2	2	3	3
Other commercial buildings such as stores, restaurants, and automobile service stations	741 957	452 876	205 434	83 646	3	3	3	5
Industrial buildings and warehouses	1 171 668	656 432	333 687	181 548	3	3	4	4
Industrial buildings	972 804	525 256	283 658	163 890	2	3	3	4
Warehouses	198 864	131 176	50 029	17 657	7	7	10	11
Religious buildings	90 593	38 907	32 237	19 447	4	6	8	5
Educational buildings	202 396	109 913	60 470	32 012	4	5	4	10
Hospitals and institutional buildings	299 803	170 454	103 308	26 039	3	3	6	4
Farm buildings, nonresidential	93 748	60 022	15 466	18 259	8	11	9	12
Other nonresidential buildings	102 481	64 174	23 348	14 972	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	1 620 445	1 011 584	362 569	246 292	2	2	3	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	647 276	308 284	215 511	123 480	2	2	3	3
Private driveways and parking areas	88 266	53 446	19 961	14 858	13	15	15	24
Bridges, tunnels, and elevated highways	156 604	122 313	21 151	13 139	1	2	3	4
Power and communication transmission lines, towers, and related facilities	70 087	50 248	13 595	6 243	6	4	22	13
Sewers, water mains, and related facilities	271 928	217 581	31 173	23 172	3	3	9	6
Sewers, sewer lines, septic systems, and related facilities	190 768	153 531	21 773	15 464	3	3	10	7
Water mains and related facilities	81 159	64 050	9 400	7 708	5	5	13	7
Pipeline construction other than sewer or water lines	52 000	32 863	12 712	6 424	7	(Z)	14	28
Sewage treatment and water treatment plants	94 391	73 566	15 435	5 388	4	4	3	21
Other nonbuilding construction	239 893	153 283	33 031	53 588	12	13	17	17
Construction work, n.s.k.	325 297	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	12 714	75 745	61 228	78 018	86 213	77 523	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	2 402	7 246	6 407	7 375	8 113	7 088	3	4	4	4	4	4
1522	Other residential buildings -----	158	843	784	831	904	853	17	14	14	14	15	14
1531	Operative builders -----	221	501	466	476	553	511	14	13	13	12	13	14
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	156	3 619	3 487	3 457	4 026	3 507	13	3	2	3	3	3
1542	Nonresidential buildings, n.e.c. ----	506	6 663	5 287	6 562	7 589	7 214	8	2	2	3	3	2
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	152	3 803	1 369	4 640	5 437	3 766	11	2	5	2	2	2
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	12	1 007	511	1 188	1 353	976	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	215	3 287	1 928	3 446	3 937	3 837	11	3	3	3	3	3
1629	Heavy construction, n.e.c. -----	276	1 892	1 280	2 001	2 390	1 896	12	7	7	7	7	7
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 734	11 119	10 454	11 224	11 460	11 339	2	2	2	2	2	2
1721	Painting and paper hanging -----	748	2 713	2 181	2 820	3 325	2 527	4	5	6	6	6	5
1731	Electrical work -----	1 069	7 957	7 426	7 843	8 427	8 130	2	2	2	2	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	531	3 003	2 300	3 026	3 350	3 337	5	5	5	5	5	4
1742	Plastering, drywall, and insulation work -----	441	3 203	3 011	3 236	3 365	3 199	5	3	4	4	3	3
1743	Terrazzo, tile, marble, and mosaic work -----	88	386	363	352	423	403	11	12	11	12	14	9
175	Carpentry and floor work:												
1751	Carpentry -----	1 086	3 241	2 924	3 332	3 491	3 216	3	5	6	5	5	5
1752	Floor laying and other floor work --	321	920	873	930	1 022	853	7	8	8	8	8	8
1761	Roofing, siding, and sheet metal work -----	718	3 926	3 012	4 026	4 474	4 190	4	3	4	3	3	3
1771	Concrete work -----	719	3 807	1 980	4 228	4 982	4 038	5	4	6	4	5	5
1781	Water well drilling -----	137	446	371	454	492	467	14	14	15	14	14	15
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	78	739	559	721	913	765	18	11	9	16	10	11
1793	Glass and glazing work -----	59	497	462	499	496	529	13	6	7	5	5	6
1794	Excavation work -----	389	1 813	1 217	1 968	2 257	1 808	8	8	11	9	7	8
1795	Wrecking and demolition work -----	18	88	72	65	110	105	19	4	5	5	3	3
1796	Installing building equipment, n.e.c. -----	98	1 148	985	1 145	1 173	1 288	14	5	4	8	6	3
1799	Special trade contractors, n.e.c. ----	382	1 881	1 519	2 172	2 151	1 681	9	8	8	10	8	8

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	7.6	27.2	146.3	.238	.335	.234	.275	.014
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.0	19.3	182.1	.140	.380	.343	.031	.006
1522	Other residential buildings -----	7.1	22.4	184.1	.162	.358	.383	.030	.006
1531	Operative builders -----	4.2	26.1	606.9	.080	.362	.445	(S)	*.004
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	29.7	34.2	194.3	.226	.228	.413	.078	.005
1542	Nonresidential buildings, n.e.c. -----	17.8	32.7	253.5	.175	.236	.508	.046	.006
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	29.9	39.4	240.4	.196	.350	.270	.335	.033
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	96.3	38.3	321.7	.137	(D)	.348	.071	.011
1623	Water, sewer, and utility lines -----	18.2	32.3	145.5	.264	.313	.084	.155	.047
1629	Heavy construction, n.e.c. -----	8.9	31.0	193.4	.208	.265	.305	.260	.034
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.6	29.4	128.4	.307	.377	.071	.477	.012
1721	Painting and paper hanging -----	4.4	20.1	64.1	.379	.278	.036	.456	.013
1731	Electrical work -----	9.3	30.1	104.9	.358	.396	(S)	.406	.010
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6.5	23.1	82.2	.325	.366	.036	.730	.012
1742	Plastering, drywall, and insulation work -----	8.7	24.0	85.4	.339	.380	.047	.876	.013
1743	Terrazzo, tile, marble, and mosaic work -----	5.7	23.9	89.6	.345	.425	(S)	.920	.008
175	Carpentry and floor work:								
1751	Carpentry -----	3.7	19.3	91.1	.261	.381	.123	.341	.007
1752	Floor laying and other floor work -----	3.8	21.5	107.1	.267	.450	.053	.542	.013
1761	Roofing, siding, and sheet metal work -----	6.9	22.7	97.0	.294	.413	.045	.392	.014
1771	Concrete work -----	6.4	23.1	100.9	.277	.413	.054	.457	.012
1781	Water well drilling -----	4.7	21.8	138.9	.226	.429	.028	.121	.014
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	11.3	31.2	103.4	.363	(D)	.036	.578	.019
1793	Glass and glazing work -----	13.3	26.7	120.7	.349	.476	.019	.745	.023
1794	Excavation work -----	5.8	23.2	105.9	.272	.293	.102	.639	.044
1795	Wrecking and demolition work -----	6.3	24.7	127.5	.251	.169	.106	.049	.039
1796	Installing building equipment, n.e.c. -----	15.6	26.2	95.1	.366	.275	.033	.409	.015
1799	Special trade contractors, n.e.c. -----	6.5	21.7	87.5	.329	.371	.057	.401	.020

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHICAGO–GARY–KENOSHA, IL–IN–WI CMSA											
15,16, 17	Construction industries	17 461	168 121	5 399 233	22 184 439	16 162 846	10 365 237	6 228 715	6 021 593	279 047	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	2 885	11 080	233 167	1 376 443	983 916	527 016	491 491	392 527	12 220	4	4
1522	Other residential buildings	243	1 227	33 414	237 423	116 365	73 322	43 972	121 059	1 346	10	9
1531	Operative builders	548	5 255	184 956	2 318 036	1 243 261	803 724	478 592	1 074 775	9 348	5	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	234	3 719	137 975	904 972	414 983	257 419	187 174	489 989	6 576	5	3
1542	Nonresidential buildings, n.e.c.	856	12 245	444 751	3 659 631	1 234 914	792 052	543 363	2 424 717	21 504	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	201	5 458	221 418	1 017 241	780 051	478 541	349 073	237 189	25 837	2	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	30	1 974	86 144	374 933	273 385	189 102	84 397	101 548	6 403	4	12
1623	Water, sewer, and utility lines	239	4 256	170 523	590 859	506 731	336 813	181 403	84 128	19 833	3	2
1629	Heavy construction, n.e.c.	(S)	7 450	269 993	1 088 583	843 673	664 918	244 021	244 910	21 311	1	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	2 446	25 623	867 194	2 657 598	2 406 530	1 506 359	924 498	251 067	29 898	2	2
1721	Painting and paper hanging	996	5 830	161 165	375 898	343 850	263 365	82 935	32 048	6 311	4	3
1731	Electrical work	1 723	19 593	727 771	1 992 008	1 885 342	1 200 925	691 395	106 666	21 936	1	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work.....	816	6 484	184 849	484 270	464 542	311 663	154 936	19 728	7 013	3	4
1742	Plastering, drywall, and insulation work	506	6 676	208 099	564 077	518 750	339 914	180 603	45 328	5 270	3	4
1743	Terrazzo, tile, marble, and mosaic work	157	1 237	35 821	104 163	(D)	61 701	37 746	(D)	695	5	(D)
175	Carpentry and floor work:											
1751	Carpentry	1 357	9 556	259 590	761 948	698 659	420 608	284 683	63 288	10 802	3	3
1752	Floor laying and other floor work	395	2 687	77 301	262 710	244 966	137 171	110 431	17 744	5 292	6	4
1761	Roofing, siding, and sheet metal work	946	8 807	261 216	842 191	768 463	467 465	307 554	73 728	12 749	3	4
1771	Concrete work	1 095	8 991	244 995	868 094	788 541	441 503	351 094	79 553	21 069	3	3
1781	Water well drilling	54	421	13 407	39 793	(D)	24 851	14 483	(D)	1 904	9	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	102	1 833	64 863	177 653	161 900	112 839	53 591	15 753	2 714	6	2
1793	Glass and glazing work	151	1 372	41 712	126 986	122 562	70 719	59 204	4 424	850	6	4
1794	Excavation work	351	2 531	85 334	285 719	257 998	189 803	73 018	27 721	14 145	5	4
1795	Wrecking and demolition work	(S)	1 529	32 845	89 343	(D)	70 086	23 211	(D)	3 295	3	(D)
1796	Installing building equipment, n.e.c.	131	3 704	129 286	353 616	333 078	230 855	105 977	20 538	3 408	2	1
1799	Special trade contractors, n.e.c.	730	8 584	221 445	630 249	554 850	392 504	169 869	75 399	7 318	8	5
	Chicago, IL PMSA											
15,16, 17	Construction industries	15 745	150 021	4 872 634	20 279 362	14 635 290	9 343 621	5 695 384	5 644 072	248 879	1	1
	(See appropriate State for SIC detail.)											
	Gary, IN PMSA											
15,16, 17	Construction industries	1 245	14 122	405 843	1 419 834	1 163 027	783 878	397 404	256 807	22 143	2	2
	(See appropriate State for SIC detail.)											
	Kankakee, IL PMSA											
15,16, 17	Construction industries	(S)	1 854	58 314	220 555	175 810	123 380	56 394	44 745	5 023	8	5
	(See appropriate State for SIC detail.)											

WI-14 WISCONSIN

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHICAGO–GARY–KENOSHA, IL–IN–WI CMSA—Con.											
	Kenosha, WI PMSA											
15,16,17	Construction industries	290	2 124	62 443	264 688	188 720	114 359	79 533	75 969	3 002	3	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	63	(S)	4 525	24 505	15 981	8 384	9 048	8 524	(D)	(S)	11
1522	Other residential buildings	*5	*9	133	942	(D)	378	187	(D)	(D)	58	(D)
1531	Operative builders	*4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c.	8	218	7 431	36 317	19 042	13 600	6 073	17 275	(D)	(D)	(Z)
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	—	—	—	—	—	—	—	—	—	—	—
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1629	Heavy construction, n.e.c.	5	(D)	394	(D)	(D)	1 576	499	(D)	(D)	(D)	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	37	422	14 134	45 434	40 649	29 807	11 289	4 785	*458	4	6
1721	Painting and paper hanging	(S)	109	2 536	(D)	(D)	4 778	1 682	(D)	173	7	(D)
1731	Electrical work	16	181	(D)	(D)	(D)	(D)	(D)	(D)	(D)	6	(D)
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	11	44	530	2 235	2 185	1 796	699	(S)	(D)	(Z)	(Z)
1742	Plastering, drywall, and insulation work	14	(D)	(D)	(D)	(D)	2 071	(D)	(D)	(D)	(D)	(D)
1743	Terrazzo, tile, marble, and mosaic work	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	28	*105	*2 150	7 255	6 794	*4 380	2 424	461	(D)	44	36
1752	Floor laying and other floor work	5	(D)	(D)	4 546	4 241	2 217	(D)	305	(D)	(D)	1
1761	Roofing, siding, and sheet metal work	14	71	1 570	5 235	5 151	2 812	2 339	*84	(D)	22	21
1771	Concrete work	29	140	2 862	11 073	10 673	5 767	4 928	400	(D)	10	6
1781	Water well drilling	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	—	—	—	—	—	—	—	—	—	—	—
1793	Glass and glazing work	5	16	244	(D)	(D)	(D)	(D)	(D)	(D)	9	(D)
1794	Excavation work	9	33	972	4 041	3 539	2 442	1 097	502	(D)	12	8
1795	Wrecking and demolition work	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c.	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1799	Special trade contractors, n.e.c.	7	11	267	952	(D)	582	341	(D)	(D)	(Z)	(D)
	MILWAUKEE–RACINE, WI CMSA											
15,16,17	Construction industries	3 669	31 927	929 071	3 696 665	2 855 345	1 773 710	1 186 066	841 320	64 107	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	584	2 541	60 725	466 983	284 902	131 101	168 397	182 081	3 122	6	10
1522	Other residential buildings	22	244	7 295	33 263	(D)	12 301	9 700	(D)	79	11	(D)
1531	Operative builders	85	244	7 168	104 295	(D)	27 026	28 115	(D)	1 156	15	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	29	683	20 808	112 614	65 225	48 555	19 574	47 390	605	5	5
1542	Nonresidential buildings, n.e.c.	145	2 475	91 073	527 794	228 069	161 237	91 791	299 725	5 340	5	5

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	MILWAUKEE–RACINE, WI CMSA—Con.											
15,16,17	Construction industries—Con.											
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	32	1 269	53 374	296 916	206 552	128 204	107 377	90 365	11 143	3	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	63	1 460	45 768	170 667	157 281	103 868	53 586	13 385	7 441	6	4
1629	Heavy construction, n.e.c. -----	45	470	13 888	46 085	40 488	27 460	15 608	5 597	1 323	9	6
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	465	5 167	164 569	515 558	473 720	296 115	181 099	41 838	6 520	2	2
1721	Painting and paper hanging-----	252	1 207	25 341	60 754	58 315	43 761	14 708	2 439	596	8	5
1731	Electrical work -----	327	3 769	127 046	357 430	338 855	198 321	144 562	(S)	4 631	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	197	1 741	43 579	129 840	125 394	80 153	46 656	4 446	1 856	7	9
1742	Plastering, drywall, and insulation work -----	106	1 336	35 435	91 789	86 611	59 384	28 291	5 178	1 171	5	3
1743	Terrazzo, tile, marble, and mosaic work -----	32	293	7 297	(D)	(D)	(D)	(D)	(S)	439	19	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	360	1 535	34 847	103 562	92 400	59 351	33 843	11 163	1 433	8	7
1752	Floor laying and other floor work ---	(S)	642	13 481	44 457	41 303	24 395	19 153	3 154	1 273	11	10
1761	Roofing, siding, and sheet metal work -----	255	1 982	47 159	165 406	156 071	94 794	63 655	9 335	2 704	5	4
1771	Concrete work -----	202	1 307	32 148	104 854	98 570	57 451	43 230	6 285	2 630	8	7
1781	Water well drilling -----	29	199	7 484	21 834	21 025	12 625	8 401	809	678	12	17
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	21	341	11 875	33 774	31 550	21 475	11 052	2 224	(D)	9	6
1793	Glass and glazing work -----	23	357	(D)	28 130	27 234	19 237	13 861	895	(D)	8	8
1794	Excavation work -----	92	696	17 034	65 666	56 447	39 551	17 411	9 218	6 797	15	7
1795	Wrecking and demolition work -----	9	(D)	(D)	5 067	4 482	3 531	987	585	(D)	(D)	(Z)
1796	Installing building equipment, n.e.c. -	48	824	23 710	63 337	61 685	45 309	17 132	1 652	804	6	6
1799	Special trade contractors, n.e.c. ----	105	899	19 438	59 753	54 477	32 993	22 789	5 276	840	13	12
	Milwaukee–Waukesha, WI PMSA											
15,16,17	Construction industries -----	3 254	29 003	848 416	3 357 418	2 587 785	1 617 462	1 072 660	769 633	54 656	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	522	2 296	55 924	436 239	263 274	120 792	156 983	172 966	2 705	7	11
1522	Other residential buildings -----	18	241	7 248	33 122	(D)	12 199	9 663	(D)	70	11	(D)
1531	Operative builders -----	78	201	5 554	91 203	44 360	22 024	25 108	46 843	(D)	18	28
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	19	501	16 186	88 308	53 233	41 259	(D)	35 075	515	6	6
1542	Nonresidential buildings, n.e.c. -----	136	2 367	87 583	511 970	220 088	157 271	87 604	291 882	4 980	5	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	27	(D)	(D)	(D)	(D)	(D)	(D)	(D)	6 728	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	56	1 355	42 381	158 116	145 919	97 674	48 402	12 196	(D)	6	4
1629	Heavy construction, n.e.c. -----	39	432	12 128	40 148	(D)	(D)	13 926	(D)	(S)	10	(D)

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16,17	MILWAUKEE—RACINE, WI CMSA—Con.											
	Milwaukee—Waukesha, WI PMSA—Con.											
	Construction industries—Con.											
	Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning	401	4 604	147 440	459 881	423 050	268 725	157 513	36 831	5 867	2	2
	1721 Painting and paper hanging	229	1 134	23 909	57 203	54 887	41 192	13 843	2 316	(D)	8	5
	1731 Electrical work	293	3 511	119 029	335 873	317 656	184 825	136 818	(S)	4 539	3	2
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work	178	1 605	40 852	121 535	(D)	76 079	43 135	(D)	1 531	7	(D)
	1742 Plastering, drywall, and insulation work	102	1 275	33 925	88 439	83 406	57 259	27 211	5 033	(D)	5	4
	1743 Terrazzo, tile, marble, and mosaic work	25	260	6 727	(D)	(D)	(D)	(D)	(S)	391	20	(D)
	175 Carpentry and floor work:											
	1751 Carpentry	329	1 426	33 118	96 257	86 037	56 166	30 638	10 221	1 327	8	7
	1752 Floor laying and other floor work	(S)	597	12 745	40 753	37 630	21 744	18 125	3 123	1 175	11	11
	1761 Roofing, siding, and sheet metal work	229	1 815	43 520	154 083	145 500	88 626	58 998	8 583	2 527	5	4
	1771 Concrete work	172	1 165	29 013	94 264	88 140	50 992	39 196	6 124	2 296	9	8
	1781 Water well drilling	24	186	7 277	21 035	20 226	12 156	8 071	809	659	14	18
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection	18	322	11 589	33 327	31 103	21 061	11 020	2 224	(D)	9	6
	1793 Glass and glazing work	22	(D)	(D)	(D)	(D)	(D)	(D)	895	(D)	(D)	(D)
	1794 Excavation work	75	622	15 222	57 955	48 987	33 911	15 562	8 968	5 859	16	7
	1795 Wrecking and demolition work	7	34	712	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
	1796 Installing building equipment, n.e.c.	45	804	(D)	(D)	60 942	(D)	17 037	(D)	(D)	7	6
	1799 Special trade contractors, n.e.c.	86	795	16 785	(D)	(D)	27 700	20 861	(D)	773	15	(D)
	Racine, WI PMSA											
	Construction industries	415	2 924	80 654	339 248	267 560	156 248	113 406	71 687	9 450	2	2
	15 Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses	62	245	4 801	30 744	21 628	10 309	11 414	9 116	417	10	11
	1522 Other residential buildings	*4	(S)	*47	*141	(D)	*102	*37	(D)	(S)	(S)	(D)
	1531 Operative builders	(S)	43	1 614	(S)	(D)	(S)	(S)	(D)	(D)	17	(D)
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses	10	(S)	(S)	24 306	11 992	(S)	(D)	12 314	90	(S)	7
	1542 Nonresidential buildings, n.e.c.	9	108	3 490	15 824	7 981	3 966	4 187	7 843	360	1	4
	16 Heavy construction other than building construction—contractors:											
	1611 Highway and street construction	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4 415	(D)	(D)
	162 Heavy construction, except highway:											
	1622 Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
	1623 Water, sewer, and utility lines	6	104	3 387	12 551	11 362	6 195	5 184	1 189	(D)	8	7
	1629 Heavy construction, n.e.c.	6	38	1 760	5 937	(D)	(D)	1 682	(D)	198	(Z)	(D)
	17 Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning	64	563	17 129	55 677	50 670	27 390	23 587	5 007	653	7	7
	1721 Painting and paper hanging	23	73	1 432	3 551	3 428	2 569	865	123	(D)	18	9
	1731 Electrical work	34	258	8 017	21 557	21 199	13 496	7 744	358	92	7	1
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work	(S)	136	2 727	8 305	(D)	4 074	3 522	(D)	325	26	(D)
	1742 Plastering, drywall, and insulation work	(S)	60	1 510	3 350	3 205	2 125	(S)	(S)	(D)	(Z)	(Z)
	1743 Terrazzo, tile, marble, and mosaic work	*7	*34	*570	*1 921	*1 874	*1 104	*918	*47	*48	53	52
	175 Carpentry and floor work:											
	1751 Carpentry	31	(S)	(S)	7 305	6 363	(S)	3 205	942	106	(S)	20
	1752 Floor laying and other floor work	(S)	44	736	3 704	3 673	2 650	(S)	*31	98	12	6
	1761 Roofing, siding, and sheet metal work	26	168	3 639	11 323	10 571	6 168	4 656	751	177	13	13

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	MILWAUKEE–RACINE, WI CMSA—Con.											
	Racine, WI PMSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1771	Concrete work	30	143	3 135	10 590	10 430	6 459	4 034	*161	*334	18	18
1781	Water well drilling	(S)	*13	*207	*799	*799	*469	*330	—	(S)	74	65
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	*3	(S)	*286	*447	*447	*415	*32	—	—	(S)	71
1793	Glass and glazing work	1	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1794	Excavation work	17	74	1 812	7 710	7 460	5 640	1 849	*250	938	21	16
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ..	3	19	(D)	(D)	743	(D)	95	(D)	(D)	(Z)	(Z)
1799	Special trade contractors, n.e.c.	19	104	2 653	(D)	(D)	5 293	1 928	(D)	*67	22	(D)
	MINNEAPOLIS–ST. PAUL, MN–WI MSA											
15,16,17	Construction industries	6 022	57 068	1 746 540	8 585 142	5 752 252	3 678 458	2 286 669	2 832 890	121 034	2	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 062	3 861	82 032	626 103	390 582	188 316	220 047	235 521	4 817	5	6
1522	Other residential buildings	(S)	262	7 764	(D)	(D)	10 725	14 429	(D)	160	11	(D)
1531	Operative builders	262	1 418	47 540	748 053	432 744	226 664	224 836	315 308	2 236	9	12
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	55	3 453	97 561	(D)	(D)	(D)	89 017	(D)	3 116	32	(D)
1542	Nonresidential buildings, n.e.c.	312	5 062	178 218	1 681 161	598 535	409 322	224 271	1 082 626	11 821	5	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	58	2 566	110 089	491 100	(D)	259 259	185 415	(D)	15 773	9	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	99	1 743	57 377	227 036	193 336	122 453	71 725	33 700	10 907	6	5
1629	Heavy construction, n.e.c.	(S)	(S)	(S)	226 605	169 796	122 802	47 587	56 808	3 765	(S)	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	741	8 160	285 960	925 290	804 519	490 228	320 279	120 771	11 453	2	2
1721	Painting and paper hanging	324	1 842	48 307	129 043	120 374	86 367	34 569	8 670	3 562	6	5
1731	Electrical work	609	6 540	229 404	590 947	568 679	363 501	228 857	22 268	7 916	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	295	2 211	52 100	163 961	152 503	95 304	57 367	11 458	2 852	8	6
1742	Plastering, drywall, and insulation work	253	2 821	82 743	228 516	203 671	130 721	74 482	24 845	1 751	4	4
1743	Terrazzo, tile, marble, and mosaic work	95	667	18 025	55 508	53 217	31 866	25 037	*2 291	*483	10	11
175	Carpentry and floor work:											
1751	Carpentry	401	2 378	48 523	165 505	145 852	96 337	50 297	(S)	1 517	7	8
1752	Floor laying and other floor work ..	(S)	767	16 945	68 768	62 922	35 597	27 797	(S)	1 009	12	10
1761	Roofing, siding, and sheet metal work	266	2 638	73 765	275 409	250 765	138 446	121 455	24 643	4 399	5	4
1771	Concrete work	344	2 742	69 316	240 935	221 029	130 636	98 470	19 906	9 035	6	5
1781	Water well drilling	50	(D)	7 456	27 386	26 267	16 164	10 103	1 119	1 720	(D)	4
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	28	868	31 582	86 328	80 682	63 175	19 075	5 646	1 459	4	2
1793	Glass and glazing work	42	507	14 215	58 956	51 413	25 896	31 561	7 542	1 035	4	15
1794	Excavation work	182	1 341	38 777	146 365	124 409	97 940	33 708	21 955	11 458	9	6
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ..	53	1 178	39 382	121 820	116 749	95 862	22 703	5 071	1 755	4	4
1799	Special trade contractors, n.e.c.	235	2 379	60 944	163 785	151 302	119 487	48 489	12 483	5 869	6	7

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings.

Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
- **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
- **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- **Outdoor swimming pools.** Includes wading pools and reflecting pools.
- **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
- **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
- **Fencing.** Includes all types of fencing.
- **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
- **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
- **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- **Harbor and port facilities.** Includes docks, piers, and wharves.
- **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
- **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
- **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
- **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
- **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

Nonbuilding construction:

- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Appendix D. Metropolitan Areas

[Titles and definitions shown for MSA's, CMSA's, and PMSA's are those established by the Office of Management and Budget as of June 30, 1993]

Abilene, TX MSA

Taylor County, TX

Akron, OH PMSA—see Cleveland–Akron, OH CMSA

Albany, GA MSA

Dougherty County, GA
Lee County, GA

Albany–Schenectady–Troy, NY MSA

Albany County, NY
Montgomery County, NY
Rensselaer County, NY
Saratoga County, NY
Schenectady County, NY
Schoharie County, NY

Albuquerque, NM MSA

Bernalillo County, NM
Sandoval County, NM
Valencia County, NM

Alexandria, LA MSA

Rapides Parish, LA

Allentown–Bethlehem–Easton, PA MSA

Carbon County, PA
Lehigh County, PA
Northampton County, PA

Altoona, PA MSA

Blair County, PA

Amarillo, TX MSA

Potter County, TX
Randall County, TX

Anchorage, AK MSA

Anchorage Borough, AK

Ann Arbor, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Anniston, AL MSA

Calhoun County, AL

Appleton–Oshkosh–Neenah, WI MSA

Calumet County, WI
Outagamie County, WI
Winnebago County, WI

Asheville, NC MSA

Buncombe County, NC
Madison County, NC

Athens, GA MSA

Clarke County, GA
Madison County, GA
Oconee County, GA

Atlanta, GA MSA

Barrow County, GA
Bartow County, GA

Atlanta, GA MSA—Con.

Carroll County, GA
Cherokee County, GA
Clayton County, GA
Cobb County, GA
Coweta County, GA
DeKalb County, GA
Douglas County, GA
Fayette County, GA
Forsyth County, GA
Fulton County, GA
Gwinnett County, GA
Henry County, GA
Newton County, GA
Paulding County, GA
Pickens County, GA
Rockdale County, GA
Spalding County, GA
Walton County, GA

Atlantic–Cape May, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Augusta–Aiken, GA–SC MSA

Columbia County, GA
McDuffie County, GA
Richmond County, GA
Aiken County, SC
Edgefield County, SC

Austin–San Marcos, TX MSA

Bastrop County, TX
Caldwell County, TX
Hays County, TX
Travis County, TX
Williamson County, TX

Bakersfield, CA MSA

Kern County, CA

Baltimore, MD PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA

Bangor, ME MSA

Penobscot County, ME (part)
Bangor city, ME
Brewer city, ME
Eddington town, ME
Glenburn town, ME
Hampden town, ME
Hermon town, ME
Holden town, ME
Kenduskeag town, ME
Milford town, ME
Old Town city, ME
Orono town, ME
Orrington town, ME
Penobscot Indian Island Reservation, ME
Veazie town, ME

Bangor, ME MSA—Con.

Waldo County, ME (part)
Winterport town, ME

Barnstable–Yarmouth, MA MSA

Barnstable County, MA (part)
Barnstable city, MA
Brewster town, MA
Chatham town, MA
Dennis town, MA
Eastham town, MA
Harwich town, MA
Mashpee town, MA
Orleans town, MA
Sandwich town, MA
Yarmouth town, MA

Baton Rouge, LA MSA

Ascension Parish, LA
East Baton Rouge Parish, LA
Livingston Parish, LA
West Baton Rouge Parish, LA

Beaumont–Port Arthur, TX MSA

Hardin County, TX
Jefferson County, TX
Orange County, TX

Bellingham, WA MSA

Whatcom County, WA

Benton Harbor, MI MSA

Berrien County, MI

Bergen–Passaic, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Billings, MT MSA

Yellowstone County, MT

Biloxi–Gulfport–Pascagoula, MS MSA

Hancock County, MS
Harrison County, MS
Jackson County, MS

Binghamton, NY MSA

Broome County, NY
Tioga County, NY

Birmingham, AL MSA

Blount County, AL
Jefferson County, AL
St. Clair County, AL
Shelby County, AL

Bismarck, ND MSA

Burleigh County, ND
Morton County, ND

Bloomington, IN MSA

Monroe County, IN

Bloomington–Normal, IL MSA

McLean County, IL

Boise City, ID MSA

Ada County, ID

Canyon County, ID

**Boston, MA–NH PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA**

Boston, MA–NH PMSA

Bristol County, MA (part)

Berkley town, MA

Dighton town, MA

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Essex town, MA

Gloucester city, MA

Hamilton town, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Manchester town, MA

Marblehead town, MA

Middleton town, MA

Nahant town, MA

Newbury town, MA

Newburyport city, MA

Peabody city, MA

Rockport town, MA

Rowley town, MA

Salem city, MA

Salisbury town, MA

Saugus town, MA

Swampscott town, MA

Topsfield town, MA

Wenham town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Holliston town, MA

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Lincoln town, MA

Littleton town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Sherborn town, MA

Shirley town, MA

Somerville city, MA

Stoneham town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Middlesex County, MA (part)

Stow town, MA

Sudbury town, MA

Townsend town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

Winchester town, MA

Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Cohasset town, MA

Dedham town, MA

Dover town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Millis town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Plainville town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Norwell town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

Suffolk County, MA

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA

Blackstone town, MA

Bolton town, MA

Harvard town, MA

Hopedale town, MA

Lancaster town, MA

Mendon town, MA

Milford town, MA

Millville town, MA

Southborough town, MA

Upton town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Rockingham County, NH (part)

Seabrook town, NH

South Hampton town, NH

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Halifax town, MA

Hanson town, MA

Lakeville town, MA

Middleborough town, MA

Plympton town, MA

West Bridgewater town, MA

Whitman town, MA

Fitchburg–Leominster, MA PMSA

Middlesex County, MA (part)

Ashby town, MA

Worcester County, MA (part)

Ashburnham town, MA

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lunenburg town, MA

Templeton town, MA

Westminster town, MA

Winchendon town, MA

Lawrence, MA–NH PMSA

Essex County, MA (part)

Andover town, MA

Boxford town, MA

Georgetown town, MA

Groveland town, MA

Haverhill city, MA

Lawrence city, MA

Merrimac town, MA

Methuen city, MA

North Andover town, MA

West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH

Chester town, NH

Danville town, NH

Derry town, NH

Fremont town, NH

Hampstead town, NH

Kingston town, NH

Newton town, NH

Plaistow town, NH

Raymond town, NH

Salem town, NH

Sandown town, NH

Windham town, NH

Lowell, MA–NH PMSA

Middlesex County, MA (part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Dunstable town, MA

Groton town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Tyngsborough town, MA

Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

**Boston-Worcester-Lawrence, MA-NH-ME-CT
CMSA—Con.**

Manchester, NH PMSA
 Hillsborough County, NH (part)
 Bedford town, NH
 Goffstown town, NH
 Manchester city, NH
 Weare town, NH
 Merrimack County, NH (part)
 Allentown town, NH
 Hooksett town, NH
 Rockingham County, NH (part)
 Auburn town, NH
 Candia town, NH
 Londonderry town, NH
 Nashua, NH PMSA
 Hillsborough County, NH (part)
 Amherst town, NH
 Brookline town, NH
 Greenville town, NH
 Hollis town, NH
 Hudson town, NH
 Litchfield town, NH
 Mason town, NH
 Merrimack town, NH
 Milford town, NH
 Mont Vernon town, NH
 Nashua city, NH
 New Ipswich town, NH
 Wilton town, NH
 New Bedford, MA PMSA
 Bristol County, MA (part)
 Acushnet town, MA
 Dartmouth town, MA
 Fairhaven town, MA
 Freetown town, MA
 New Bedford city, MA
 Plymouth County, MA (part)
 Marion town, MA
 Mattapoisett town, MA
 Rochester town, MA
 Portsmouth-Rochester, NH-ME PMSA
 York County, ME (part)
 Berwick town, ME
 Eliot town, ME
 Kittery town, ME
 South Berwick town, ME
 York town, ME
 Rockingham County, NH (part)
 Brentwood town, NH
 East Kingston town, NH
 Epping town, NH
 Exeter town, NH
 Greenland town, NH
 Hampton town, NH
 Hampton Falls town, NH
 Kensington town, NH
 New Castle town, NH
 Newfields town, NH
 Newington town, NH
 Newmarket town, NH
 North Hampton town, NH
 Portsmouth city, NH
 Rye town, NH
 Stratham town, NH
 Strafford County, NH (part)
 Barrington town, NH
 Dover city, NH
 Durham town, NH
 Farmington town, NH
 Lee town, NH
 Madbury town, NH
 Milton town, NH
 Rochester city, NH
 Rollinsford town, NH
 Somersworth city, NH

**Boston-Worcester-Lawrence, MA-NH-ME-CT
CMSA—Con.**

Worcester, MA-CT PMSA
 Windham County, CT (part)
 Thompson town, CT
 Hampden County, MA (part)
 Holland town, MA
 Worcester County, MA (part)
 Auburn town, MA
 Barre town, MA
 Boylston town, MA
 Brookfield town, MA
 Charlton town, MA
 Clinton town, MA
 Douglas town, MA
 Dudley town, MA
 East Brookfield town, MA
 Grafton town, MA
 Holden town, MA
 Leicester town, MA
 Millbury town, MA
 Northborough town, MA
 Northbridge town, MA
 North Brookfield town, MA
 Oakham town, MA
 Oxford town, MA
 Paxton town, MA
 Princeton town, MA
 Rutland town, MA
 Shrewsbury town, MA
 Southbridge town, MA
 Spencer town, MA
 Sterling town, MA
 Sturbridge town, MA
 Sutton town, MA
 Uxbridge town, MA
 Webster town, MA
 Westborough town, MA
 West Boylston town, MA
 West Brookfield town, MA
 Worcester city, MA

**Boulder-Longmont, CO PMSA—see
Denver- Boulder-Greeley, CO CMSA****Brazoria, TX PMSA—see Houston-
Galveston-Brazoria, TX CMSA****Bremerton, WA PMSA—see Seattle-
Tacoma- Bremerton, WA CMSA****Bridgeport, CT PMSA—see New York-
Northern New Jersey-Long Island, NY-
NJ-CT-PA CMSA****Brockton, MA PMSA—see Boston-
Worcester-Lawrence, MA-NH-ME-CT CMSA****Brownsville-Harlingen-San Benito, TX MSA**
Cameron County, TX**Bryan-College Station, TX MSA**
Brazos County, TX**Buffalo-Niagara Falls, NY MSA**
Erie County, NY
Niagara County, NY

Burlington, VT MSA
 Chittenden County, VT (part)
 Burlington city, VT
 Charlotte town, VT
 Colchester town, VT
 Essex Junction village, VT
 Essex town balance, VT
 Hinesburg town, VT
 Jericho town, VT
 Jericho village, VT
 Milton town, VT
 Milton village, VT
 Richmond town, VT
 St. George town, VT
 Shelburne town, VT

Burlington, VT MSA—Con.
 Chittenden County, VT (part)—Con.
 South Burlington city, VT
 Williston town, VT
 Winooski city, VT
 Franklin County, VT (part)
 Fairfax town, VT
 Georgia town, VT
 St. Albans city, VT
 St. Albans town, VT
 Swanton town, VT
 Swanton village, VT
 Grand Isle County, VT (part)
 Grand Isle town, VT
 South Hero town, VT

Canton-Massillon, OH MSA
Carroll County, OH
Stark County, OH**Casper, WY MSA**
Natrona County, WY**Cedar Rapids, IA MSA**
Linn County, IA**Champaign-Urbana, IL MSA**
Champaign County, IL**Charleston-North Charleston, SC MSA**
Berkeley County, SC
Charleston County, SC
Dorchester County, SC**Charleston, WV MSA**
Kanawha County, WV
Putnam County, WV**Charlotte-Gastonia-Rock Hill, NC-SC MSA**
Cabarrus County, NC
Gaston County, NC
Lincoln County, NC
Mecklenburg County, NC
Rowan County, NC
Union County, NC
York County, SC**Charlottesville, VA MSA**
Albemarle County, VA
Fluvanna County, VA
Greene County, VA
Charlottesville city, VA**Chattanooga, TN-GA MSA**
Catoosa County, GA
Dade County, GA
Walker County, GA
Hamilton County, TN
Marion County, TN**Cheyenne, WY MSA**
Laramie County, WY**Chicago, IL PMSA—see Chicago-Gary-
Kenosha, IL-IN-WI CMSA**

Chicago-Gary-Kenosha, IL-IN-WI CMSA
 Chicago, IL PMSA
 Cook County, IL
 DeKalb County, IL
 DuPage County, IL
 Grundy County, IL
 Kane County, IL
 Kendall County, IL
 Lake County, IL
 McHenry County, IL
 Will County, IL
 Gary, IN PMSA
 Lake County, IN
 Porter County, IN
 Kankakee, IL PMSA
 Kankakee County, IL

Chicago–Gary–Kenosha, IL–IN–WI CMSA—Con.

Kenosha, WI PMSA
Kenosha County, WI

Chico–Paradise, CA MSA

Butte County, CA

Cincinnati, OH–KY–IN PMSA—see**Cincinnati–Hamilton, OH–KY–IN CMSA****Cincinnati–Hamilton, OH–KY–IN CMSA**

Cincinnati, OH–KY–IN PMSA
Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH
Hamilton–Middletown, OH PMSA
Butler County, OH

Clarksville–Hopkinsville, TN–KY MSA

Christian County, KY
Montgomery County, TN

Cleveland–Lorain–Elyria, OH PMSA—see**Cleveland–Akron, OH CMSA****Cleveland–Akron, OH CMSA**

Akron, OH PMSA
Portage County, OH
Summit County, OH
Cleveland–Lorain–Elyria, OH PMSA
Ashtabula County, OH
Cuyahoga County, OH
Geauga County, OH
Lake County, OH
Lorain County, OH
Medina County, OH

Colorado Springs, CO MSA

El Paso County, CO

Columbia, MO MSA

Boone County, MO

Columbia, SC MSA

Lexington County, SC
Richland County, SC

Columbus, GA–AL MSA

Russell County, AL
Chattahoochee County, GA
Harris County, GA
Muscooke County, GA

Columbus, OH MSA

Delaware County, OH
Fairfield County, OH
Franklin County, OH
Licking County, OH
Madison County, OH
Pickaway County, OH

Corpus Christi, TX MSA

Nueces County, TX
San Patricio County, TX

Cumberland, MD–WV MSA

Allegany County, MD
Mineral County, WV

Dallas, TX PMSA—see Dallas–Fort Worth, TX CMSA**Dallas–Fort Worth, TX CMSA**

Dallas, TX PMSA
Collin County, TX
Dallas County, TX
Denton County, TX
Ellis County, TX
Henderson County, TX
Hunt County, TX
Kaufman County, TX
Rockwall County, TX
Fort Worth–Arlington, TX PMSA
Hood County, TX
Johnson County, TX
Parker County, TX
Tarrant County, TX

Danbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Danville, VA MSA**

Pittsylvania County, VA
Danville city, VA

Davenport–Moline–Rock Island, IA–IL MSA

Henry County, IL
Rock Island County, IL
Scott County, IA

Dayton–Springfield, OH MSA

Clark County, OH
Greene County, OH
Miami County, OH
Montgomery County, OH

Daytona Beach, FL MSA

Flagler County, FL
Volusia County, FL

Decatur, AL MSA

Lawrence County, AL
Morgan County, AL

Decatur, IL MSA

Macon County, IL

Denver, CO PMSA—see Denver–Boulder–Greeley, CO CMSA**Denver–Boulder–Greeley, CO CMSA**

Boulder–Longmont, CO PMSA
Boulder County, CO
Denver, CO PMSA
Adams County, CO
Arapahoe County, CO
Denver County, CO
Douglas County, CO
Jefferson County, CO
Greeley, CO PMSA
Weld County, CO

Des Moines, IA MSA

Dallas County, IA
Polk County, IA
Warren County, IA

Detroit, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA**Detroit–Ann Arbor–Flint, MI CMSA**

Ann Arbor, MI PMSA
Lenawee County, MI
Livingston County, MI
Washtenaw County, MI
Detroit, MI PMSA
Lapeer County, MI
Macomb County, MI
Monroe County, MI
Oakland County, MI
St. Clair County, MI
Wayne County, MI

Detroit–Ann Arbor–Flint, MI CMSA—Con.

Flint, MI PMSA
Genesee County, MI

Dothan, AL MSA

Dale County, AL
Houston County, AL

Dover, DE MSA

Kent County, DE

Dubuque, IA MSA

Dubuque County, IA

Duluth–Superior, MN–WI MSA

St. Louis County, MN
Douglas County, WI

Dutchess County, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Eau Claire, WI MSA**

Chippewa County, WI
Eau Claire County, WI

El Paso, TX MSA

El Paso County, TX

Elkhart–Goshen, IN MSA

Elkhart County, IN

Elmira, NY MSA

Chemung County, NY

Enid, OK MSA

Garfield County, OK

Erie, PA MSA

Erie County, PA

Eugene–Springfield, OR MSA

Lane County, OR

Evansville–Henderson, IN–KY MSA

Posey County, IN
Vanderburgh County, IN
Warrick County, IN
Henderson County, KY

Fargo–Moorhead, ND–MN MSA

Clay County, MN
Cass County, ND

Fayetteville, NC MSA

Cumberland County, NC

Fayetteville–Springdale–Rogers, AR MSA

Benton County, AR
Washington County, AR

Fitchburg–Leominster, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Flint, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA****Florence, AL MSA**

Colbert County, AL
Lauderdale County, AL

Florence, SC MSA

Florence County, SC

Fort Collins–Loveland, CO MSA

Larimer County, CO

Fort Lauderdale, FL PMSA—see Miami–Fort Lauderdale, FL CMSA**Fort Myers–Cape Coral, FL MSA**

Lee County, FL

Fort Pierce–Port St. Lucie, FL MSA

Martin County, FL
St. Lucie County, FL

Fort Smith, AR—OK MSA
Crawford County, AR
Sebastian County, AR
Sequoyah County, OK

Fort Walton Beach, FL MSA
Okaloosa County, FL

Fort Wayne, IN MSA
Adams County, IN
Allen County, IN
De Kalb County, IN
Huntington County, IN
Wells County, IN
Whitley County, IN

**Fort Worth—Arlington, TX PMSA—see
Dallas—Fort Worth, TX CMSA**

Fresno, CA MSA
Fresno County, CA
Madera County, CA

Gadsden, AL MSA
Etowah County, AL

Gainesville, FL MSA
Alachua County, FL

**Galveston—Texas City, TX PMSA—see
Houston—Galveston—Brazoria, TX CMSA**

**Gary, IN PMSA—see Chicago—Gary—
Kenosha, IL—IN—WI CMSA**

Glens Falls, NY MSA
Warren County, NY
Washington County, NY

Goldsboro, NC MSA
Wayne County, NC

Grand Forks, ND—MN MSA
Polk County, MN
Grand Forks County, ND

Grand Rapids—Muskegon—Holland, MI MSA
Allegan County, MI
Kent County, MI
Muskegon County, MI
Ottawa County, MI

Great Falls, MT MSA
Cascade County, MT

**Greeley, CO PMSA—see Denver—Boulder—
Greeley, CO CMSA**

Green Bay, WI MSA
Brown County, WI

**Greensboro—Winston-Salem—High Point, NC
MSA**
Alamance County, NC
Davidson County, NC
Davie County, NC
Forsyth County, NC
Guilford County, NC
Randolph County, NC
Stokes County, NC
Yadkin County, NC

Greenville, NC MSA
Pitt County, NC

Greenville—Spartanburg—Anderson, SC MSA
Anderson County, SC
Cherokee County, SC
Greenville County, SC
Pickens County, SC
Spartanburg County, SC

**Hagerstown, MD PMSA—see Washington—
Baltimore, DC—MD—VA—WV CMSA**

**Hamilton—Middletown, OH PMSA—see
Cincinnati—Hamilton, OH—KY—IN CMSA**

Harrisburg—Lebanon—Carlisle, PA MSA
Cumberland County, PA
Dauphin County, PA
Lebanon County, PA
Perry County, PA

Hartford, CT MSA
Hartford County, CT (part)
Avon town, CT
Berlin town, CT
Bloomfield town, CT
Bristol city, CT
Burlington town, CT
Canton town, CT
East Granby town, CT
East Hartford town, CT
East Windsor town, CT
Enfield town, CT
Farmington town, CT
Glastonbury town, CT
Granby town, CT
Hartford city, CT
Manchester town, CT
Marlborough town, CT
New Britain city, CT
Newington town, CT
Plainville town, CT
Rocky Hill town, CT
Simsbury town, CT
Southington town, CT
South Windsor town, CT
Suffield town, CT
West Hartford town, CT
Wethersfield town, CT
Windsor town, CT
Windsor Locks town, CT

Litchfield County, CT (part)
Barkhamsted town, CT
Harwinton town, CT
New Hartford town, CT
Plymouth town, CT
Winchester town, CT

Middlesex County, CT (part)
Cromwell town, CT
Durham town, CT
East Haddam town, CT
East Hampton town, CT
Haddam town, CT
Middlefield town, CT
Middletown city, CT
Portland town, CT

New London County, CT (part)
Colchester town, CT
Lebanon town, CT

Tolland County, CT (part)
Andover town, CT
Bolton town, CT
Columbia town, CT
Coventry town, CT
Ellington town, CT
Hebron town, CT
Mansfield town, CT
Somers town, CT
Stafford town, CT
Tolland town, CT
Vernon town, CT
Willington town, CT

Windham County, CT (part)
Ashford town, CT
Chaplin town, CT
Windham town, CT

Hickory—Morganton, NC MSA
Alexander County, NC
Burke County, NC
Caldwell County, NC
Catawba County, NC

Honolulu, HI MSA
Honolulu County, HI

Houma, LA MSA
Lafourche Parish, LA
Terrebonne Parish, LA

**Houston, TX PMSA—see Houston—Galveston—
Brazoria, TX CMSA**

Houston—Galveston—Brazoria, TX CMSA
Brazoria, TX PMSA
Brazoria County, TX
Galveston—Texas City, TX PMSA
Galveston County, TX
Houston, TX PMSA
Chambers County, TX
Fort Bend County, TX
Harris County, TX
Liberty County, TX
Montgomery County, TX
Waller County, TX

Huntington—Ashland, WV—KY—OH MSA
Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Huntsville, AL MSA
Limestone County, AL
Madison County, AL

Indianapolis, IN MSA
Boone County, IN
Hamilton County, IN
Hancock County, IN
Hendricks County, IN
Johnson County, IN
Madison County, IN
Marion County, IN
Morgan County, IN
Shelby County, IN

Iowa City, IA MSA
Johnson County, IA

Jackson, MI MSA
Jackson County, MI

Jackson, MS MSA
Hinds County, MS
Madison County, MS
Rankin County, MS

Jackson, TN MSA
Madison County, TN

Jacksonville, FL MSA
Clay County, FL
Duval County, FL
Nassau County, FL
St. Johns County, FL

Jacksonville, NC MSA
Onslow County, NC

Jamestown, NY MSA
Chautauqua County, NY

Janesville—Beloit, WI MSA
Rock County, WI

Jersey City, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Johnson City—Kingsport—Bristol, TN—VA MSA

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol city, VA

Johnstown, PA MSA

Cambria County, PA
Somerset County, PA

Joplin, MO MSA

Jasper County, MO
Newton County, MO

Kalamazoo—Battle Creek, MI MSA

Calhoun County, MI
Kalamazoo County, MI
Van Buren County, MI

Kankakee, IL PMSA—see Chicago—Gary—Kenosha, IL—IN—WI CMSA

Kansas City, MO—KS MSA

Johnson County, KS
Leavenworth County, KS
Miami County, KS
Wyandotte County, KS
Cass County, MO
Clay County, MO
Clinton County, MO
Jackson County, MO
Lafayette County, MO
Platte County, MO
Ray County, MO

Kenosha, WI PMSA—see Chicago—Gary—Kenosha, IL—IN—WI CMSA

Killeen—Temple, TX MSA

Bell County, TX
Coryell County, TX

Knoxville, TN MSA

Anderson County, TN
Blount County, TN
Knox County, TN
Loudon County, TN
Sevier County, TN
Union County, TN

Kokomo, IN MSA

Howard County, IN
Tipton County, IN

La Crosse, WI—MN MSA

Houston County, MN
La Crosse County, WI

Lafayette, LA MSA

Acadia Parish, LA
Lafayette Parish, LA
St. Landry Parish, LA
St. Martin Parish, LA

Lafayette, IN MSA

Clinton County, IN
Tippecanoe County, IN

Lake Charles, LA MSA

Calcasieu Parish, LA

Lakeland—Winter Haven, FL MSA

Polk County, FL

Lancaster, PA MSA

Lancaster County, PA

Lansing—East Lansing, MI MSA

Clinton County, MI
Eaton County, MI
Ingham County, MI

Laredo, TX MSA

Webb County, TX

Las Cruces, NM MSA

Dona Ana County, NM

Las Vegas, NV—AZ MSA

Mohave County, AZ
Clark County, NV
Nye County, NV

Lawrence, KS MSA

Douglas County, KS

Lawrence, MA—NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Lawton, OK MSA

Comanche County, OK

Lewiston—Auburn, ME MSA

Androscoggin County, ME (part)
Auburn city, ME
Greene town, ME
Lewiston city, ME
Lisbon town, ME
Mechanic Falls town, ME
Poland town, ME
Sabattus town, ME
Turner town, ME
Wales town, ME

Lexington, KY MSA

Bourbon County, KY
Clark County, KY
Fayette County, KY
Jessamine County, KY
Madison County, KY
Scott County, KY
Woodford County, KY

Lima, OH MSA

Allen County, OH
Auglaize County, OH

Lincoln, NE MSA

Lancaster County, NE

Little Rock—North Little Rock, AR MSA

Faulkner County, AR
Lonoke County, AR
Pulaski County, AR
Saline County, AR

Longview—Marshall, TX MSA

Gregg County, TX
Harrison County, TX
Upshur County, TX

Los Angeles—Riverside—Orange County, CA CMSA

Los Angeles—Long Beach, CA PMSA
Los Angeles County, CA
Orange County, CA PMSA
Orange County, CA
Riverside—San Bernardino, CA PMSA
Riverside County, CA
San Bernardino County, CA
Ventura, CA PMSA
Ventura County, CA

Los Angeles—Long Beach, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Louisville, KY—IN MSA

Clark County, IN
Floyd County, IN
Harrison County, IN
Scott County, IN
Bullitt County, KY
Jefferson County, KY
Oldham County, KY

Lowell, MA—NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Lubbock, TX MSA

Lubbock County, TX

Lynchburg, VA MSA

Amherst County, VA
Bedford County, VA
Campbell County, VA
Bedford city, VA
Lynchburg city, VA

Macon, GA MSA

Bibb County, GA
Houston County, GA
Jones County, GA
Peach County, GA
Twiggs County, GA

Madison, WI MSA

Dane County, WI

Manchester, NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Mansfield, OH MSA

Crawford County, OH
Richland County, OH

McAllen—Edinburg—Mission, TX MSA

Hidalgo County, TX

Medford—Ashland, OR MSA

Jackson County, OR

Melbourne—Titusville—Palm Bay, FL MSA

Brevard County, FL

Memphis, TN—AR—MS MSA

Crittenden County, AR
DeSoto County, MS
Fayette County, TN
Shelby County, TN
Tipton County, TN

Merced, CA MSA

Merced County, CA

Miami—Fort Lauderdale, FL CMSA

Fort Lauderdale, FL PMSA
Broward County, FL
Miami, FL PMSA
Dade County, FL

Miami, FL PMSA—see Miami—Fort Lauderdale, FL CMSA

Middlesex—Somerset—Hunterdon, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Milwaukee—Waukesha, WI PMSA—see Milwaukee—Racine, WI CMSA

Milwaukee—Racine, WI CMSA

Milwaukee—Waukesha, WI PMSA
Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI

Milwaukee–Racine, WI CMSA—Con.

Racine, WI PMSA
Racine County, WI

Minneapolis–St. Paul, MN–WI MSA

Anoka County, MN
Carver County, MN
Chisago County, MN
Dakota County, MN
Hennepin County, MN
Isanti County, MN
Ramsey County, MN
Scott County, MN
Sherburne County, MN
Washington County, MN
Wright County, MN
Pierce County, WI
St. Croix County, WI

Mobile, AL MSA

Baldwin County, AL
Mobile County, AL

Modesto, CA MSA

Stanislaus County, CA

Monmouth–Ocean, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Monroe, LA MSA**

Ouachita Parish, LA

Montgomery, AL MSA

Autauga County, AL
Elmore County, AL
Montgomery County, AL

Muncie, IN MSA

Delaware County, IN

Myrtle Beach, SC MSA

Horry County, SC

Naples, FL MSA

Collier County, FL

Nashua, NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Nashville, TN MSA**

Cheatham County, TN
Davidson County, TN
Dickson County, TN
Robertson County, TN
Rutherford County, TN
Sumner County, TN
Williamson County, TN
Wilson County, TN

Nassau–Suffolk, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New Bedford, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****New Haven–Meriden, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New London–Norwich, CT–RI MSA**

Middlesex County, CT (part)
Fenwick borough, CT
Old Saybrook town, CT
New London County, CT (part)
Bozrah town, CT
East Lyme town, CT
Franklin town, CT
Griswold town balance, CT
Groton city, CT
Groton town balance, CT

New London–Norwich, CT–RI MSA—Con.

New London County, CT (part)—Con.
Groton Long Point borough, CT
Jewett City borough, CT
Ledyard town, CT
Lisbon town, CT
Montville town, CT
New London city, CT
North Stonington town, CT
Norwich city, CT
Old Lyme town, CT
Preston town, CT
Salem town, CT
Sprague town, CT
Stonington borough, CT
Stonington town, CT
Waterford town, CT
Windham County, CT (part)
Canterbury town, CT
Plainfield town, CT
Washington County, RI (part)
Hopkinton town, RI
Westerly town, RI

New Orleans, LA MSA

Jefferson Parish, LA
Orleans Parish, LA
Plaquemines Parish, LA
St. Bernard Parish, LA
St. Charles Parish, LA
St. James Parish, LA
St. John the Baptist Parish, LA
St. Tammany Parish, LA

New York, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**

Bergen–Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (part)
Bridgeport city, CT
Easton town, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (part)
Ansonia city, CT
Beacon Falls town, CT
Derby city, CT
Milford city (balance), CT
Oxford town, CT
Seymour town, CT
Woodmont borough, CT
Danbury, CT PMSA
Fairfield County, CT (part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown borough, CT
Newtown town, CT
Redding town, CT
Ridgefield town, CT
Sherman town, CT
Litchfield County, CT (part)
Bridgewater town, CT
New Milford town, CT
Roxbury town, CT
Washington town, CT
Dutchess County, NY PMSA
Dutchess County, NY

New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA—Con.

Jersey City, NJ PMSA
Hudson County, NJ
Middlesex–Somerset–Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth–Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau–Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY
New Haven–Meriden, CT PMSA
Middlesex County, CT (part)
Clinton town, CT
Killingworth town, CT
New Haven County, CT (part)
Bethany town, CT
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT
Woodbridge town, CT
New York, NY PMSA
Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY
Queens County, NY
Richmond County, NY
Rockland County, NY
Westchester County, NY
Newark, NJ PMSA
Essex County, NJ
Morris County, NJ
Sussex County, NJ
Union County, NJ
Warren County, NJ
Newburgh, NY–PA PMSA
Orange County, NY
Pike County, PA
Stamford–Norwalk, CT PMSA
Fairfield County, CT (part)
Darien town, CT
Greenwich town, CT
New Canaan town, CT
Norwalk city, CT
Stamford city, CT
Weston town, CT
Westport town, CT
Wilton town, CT
Trenton, NJ PMSA
Mercer County, NJ
Waterbury, CT PMSA
Litchfield County, CT (part)
Bethlehem town, CT
Thomaston town, CT
Watertown town, CT
Woodbury town, CT
New Haven County, CT (part)
Middlebury town, CT
Naugatuck borough, CT
Prospect town, CT
Southbury town, CT
Waterbury city, CT
Wolcott town, CT

Newark, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Newburgh, NY—PA PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Norfolk—Virginia Beach—Newport News, VA—NC MSA

Currituck County, NC
Gloucester County, VA
Isle of Wight County, VA
James City County, VA
Mathews County, VA
York County, VA
Chesapeake city, VA
Hampton city, VA
Newport News city, VA
Norfolk city, VA
Poquoson city, VA
Portsmouth city, VA
Suffolk city, VA
Virginia Beach city, VA
Williamsburg city, VA

Oakland, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Ocala, FL MSA

Marion County, FL

Odessa—Midland, TX MSA

Ector County, TX
Midland County, TX

Oklahoma City, OK MSA

Canadian County, OK
Cleveland County, OK
Logan County, OK
McClain County, OK
Oklahoma County, OK
Pottawatomie County, OK

Olympia, WA PMSA—see Seattle—Tacoma—Bremerton, WA CMSA

Omaha, NE—IA MSA

Pottawattamie County, IA
Cass County, NE
Douglas County, NE
Sarpy County, NE
Washington County, NE

Orange County, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Orlando, FL MSA

Lake County, FL
Orange County, FL
Osceola County, FL
Seminole County, FL

Owensboro, KY MSA

Daviess County, KY

Panama City, FL MSA

Bay County, FL

Parkersburg—Marietta, WV—OH MSA

Washington County, OH
Wood County, WV

Pensacola, FL MSA

Escambia County, FL
Santa Rosa County, FL

Peoria—Pekin, IL MSA

Peoria County, IL
Tazewell County, IL
Woodford County, IL

Philadelphia, PA—NJ PMSA—see Philadelphia—Wilmington—Atlantic City, PA—NJ—DE—MD CMSA

Philadelphia—Wilmington—Atlantic City, PA—NJ—DE—MD CMSA

Atlantic—Cape May, NJ PMSA

Atlantic County, NJ
Cape May County, NJ

Philadelphia, PA—NJ PMSA

Burlington County, NJ
Camden County, NJ
Gloucester County, NJ
Salem County, NJ
Bucks County, PA
Chester County, PA
Delaware County, PA
Montgomery County, PA

Philadelphia County, PA
Vineland—Millville—Bridgeton, NJ PMSA
Cumberland County, NJ

Wilmington—Newark, DE—MD PMSA
New Castle County, DE
Cecil County, MD

Phoenix—Mesa, AZ MSA

Maricopa County, AZ
Pinal County, AZ

Pine Bluff, AR MSA

Jefferson County, AR

Pittsburgh, PA MSA

Allegheny County, PA
Beaver County, PA
Butler County, PA
Fayette County, PA
Washington County, PA
Westmoreland County, PA

Pittsfield, MA MSA

Berkshire County, MA (part)
Adams town, MA
Cheshire town, MA
Dalton town, MA
Hinsdale town, MA
Lanesborough town, MA
Lee town, MA
Lenox town, MA
Pittsfield city, MA
Richmond town, MA
Stockbridge town, MA

Portland, ME MSA

Cumberland County, ME (part)
Cape Elizabeth town, ME
Casco town, ME
Cumberland town, ME
Falmouth town, ME
Freeport town, ME
Gorham town, ME
Gray town, ME
North Yarmouth town, ME
Portland city, ME
Raymond town, ME
Scarborough town, ME
South Portland city, ME
Standish town, ME
Westbrook city, ME
Windham town, ME
Yarmouth town, ME

York County, ME (part)
Buxton town, ME
Hollis town, ME
Limington town, ME
Old Orchard Beach town, ME

Portland—Vancouver, OR—WA PMSA—see Portland—Salem, OR—WA CMSA

Portland—Salem, OR—WA CMSA

Portland—Vancouver, OR—WA PMSA

Clackamas County, OR
Columbia County, OR
Multnomah County, OR
Washington County, OR
Yamhill County, OR
Clark County, WA

Salem, OR PMSA

Marion County, OR
Polk County, OR

Portsmouth—Rochester, NH—ME PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Providence—Fall River—Warwick, RI—MA MSA

Bristol County, MA (part)
Attleboro city, MA
Fall River city, MA
North Attleborough town, MA
Rehoboth town, MA
Seekonk town, MA
Somerset town, MA
Swansea town, MA
Westport town, MA
Bristol County, RI
Barrington town, RI
Bristol town, RI
Warren town, RI
Kent County, RI
Coventry town, RI
East Greenwich town, RI
Warwick city, RI
West Greenwich town, RI
West Warwick town, RI
Newport County, RI (part)
Jamestown town, RI
Little Compton town, RI
Tiverton town, RI

Providence County, RI
Burrillville town, RI
Central Falls city, RI
Cranston city, RI
Cumberland town, RI
East Providence city, RI
Foster town, RI
Glocester town, RI
Johnston town, RI
Lincoln town, RI
North Providence town, RI
North Smithfield town, RI
Pawtucket city, RI
Providence city, RI
Scituate town, RI
Smithfield town, RI
Woonsocket city, RI
Washington County, RI (part)
Charlestown town, RI
Exeter town, RI
Narragansett town, RI
North Kingstown town, RI
Richmond town, RI
South Kingstown town, RI

Provo—Orem, UT MSA

Utah County, UT

Pueblo, CO MSA

Pueblo County, CO

Punta Gorda, FL MSA

Charlotte County, FL

Racine, WI PMSA—see Milwaukee—Racine, WI CMSA

Raleigh—Durham—Chapel Hill, NC MSA

Chatham County, NC
Durham County, NC
Franklin County, NC
Johnston County, NC
Orange County, NC
Wake County, NC

Rapid City, SD MSA

Pennington County, SD

Reading, PA MSA

Berks County, PA

Redding, CA MSA

Shasta County, CA

Reno, NV MSA

Washoe County, NV

Richland—Kennewick—Pasco, WA MSA

Benton County, WA
Franklin County, WA

Richmond—Petersburg, VA MSA

Charles City County, VA
Chesterfield County, VA
Dinwiddie County, VA
Goochland County, VA
Hanover County, VA
Henrico County, VA
New Kent County, VA
Powhatan County, VA
Prince George County, VA
Colonial Heights city, VA
Hopewell city, VA
Petersburg city, VA
Richmond city, VA

Riverside—San Bernardino, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Roanoke, VA MSA

Botetourt County, VA
Roanoke County, VA
Roanoke city, VA
Salem city, VA

Rochester, MN MSA

Olmsted County, MN

Rochester, NY MSA

Genesee County, NY
Livingston County, NY
Monroe County, NY
Ontario County, NY
Orleans County, NY
Wayne County, NY

Rockford, IL MSA

Boone County, IL
Ogle County, IL
Winnebago County, IL

Rocky Mount, NC MSA

Edgecombe County, NC
Nash County, NC

Sacramento, CA PMSA—see Sacramento—Yolo, CA CMSA

Sacramento—Yolo, CA CMSA

Sacramento, CA PMSA
El Dorado County, CA
Placer County, CA
Sacramento County, CA
Yolo, CA PMSA
Yolo County, CA

Saginaw—Bay City—Midland, MI MSA

Bay County, MI
Midland County, MI
Saginaw County, MI

St. Cloud, MN MSA

Benton County, MN
Stearns County, MN

St. Joseph, MO MSA

Andrew County, MO
Buchanan County, MO

St. Louis, MO—IL MSA

Clinton County, IL
Jersey County, IL
Madison County, IL
Monroe County, IL
St. Clair County, IL
Franklin County, MO
Jefferson County, MO
Lincoln County, MO
St. Charles County, MO
St. Louis County, MO
Warren County, MO
St. Louis city, MO

Salem, OR PMSA—see Portland—Salem, OR—WA CMSA

Salinas, CA MSA

Monterey County, CA

Salt Lake City—Ogden, UT MSA

Davis County, UT
Salt Lake County, UT
Weber County, UT

San Angelo, TX MSA

Tom Green County, TX

San Antonio, TX MSA

Bexar County, TX
Comal County, TX
Guadalupe County, TX
Wilson County, TX

San Diego, CA MSA

San Diego County, CA

San Francisco, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

San Francisco—Oakland—San Jose, CA CMSA

Oakland, CA PMSA
Alameda County, CA
Contra Costa County, CA
San Francisco, CA PMSA
Marin County, CA
San Francisco County, CA
San Mateo County, CA
San Jose, CA PMSA
Santa Clara County, CA
Santa Cruz—Watsonville, CA PMSA
Santa Cruz County, CA
Santa Rosa, CA PMSA
Sonoma County, CA
Vallejo—Fairfield—Napa, CA PMSA
Napa County, CA
Solano County, CA

San Jose, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

San Luis Obispo—Atascadero—Paso Robles, CA MSA

San Luis Obispo County, CA

Santa Barbara—Santa Maria—Lompoc, CA MSA

Santa Barbara County, CA

Santa Cruz—Watsonville, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Santa Fe, NM MSA

Los Alamos County, NM
Santa Fe County, NM

Santa Rosa, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Sarasota—Bradenton, FL MSA

Manatee County, FL
Sarasota County, FL

Savannah, GA MSA

Bryan County, GA
Chatham County, GA
Effingham County, GA

Scranton—Wilkes-Barre—Hazleton, PA MSA

Columbia County, PA
Lackawanna County, PA
Luzerne County, PA
Wyoming County, PA

Seattle—Bellevue—Everett, WA PMSA—see Seattle—Tacoma—Bremerton, WA CMSA

Seattle—Tacoma—Bremerton, WA CMSA

Bremerton, WA PMSA
Kitsap County, WA
Olympia, WA PMSA
Thurston County, WA
Seattle—Bellevue—Everett, WA PMSA
Island County, WA
King County, WA
Snohomish County, WA
Tacoma, WA PMSA
Pierce County, WA

Sharon, PA MSA

Mercer County, PA

Sheboygan, WI MSA

Sheboygan County, WI

Sherman—Denison, TX MSA

Grayson County, TX

Shreveport—Bossier City, LA MSA

Bossier Parish, LA
Caddo Parish, LA
Webster Parish, LA

Sioux City, IA—NE MSA

Woodbury County, IA
Dakota County, NE

Sioux Falls, SD MSA

Lincoln County, SD
Minnehaha County, SD

South Bend, IN MSA

St. Joseph County, IN

Spokane, WA MSA

Spokane County, WA

Springfield, IL MSA

Menard County, IL
Sangamon County, IL

Springfield, MO MSA

Christian County, MO
Greene County, MO
Webster County, MO

Springfield, MA MSA

Franklin County, MA (part)
Sunderland town, MA
Hampden County, MA (part)
Agawam city, MA
Chicopee city, MA

Springfield, MA MSA—Con.

Hampden County, MA (part)—Con.
 East Longmeadow town, MA
 Hampden town, MA
 Holyoke city, MA
 Longmeadow town, MA
 Ludlow town, MA
 Monson town, MA
 Montgomery town, MA
 Palmer town, MA
 Russell town, MA
 Southwick town, MA
 Springfield city, MA
 Westfield city, MA
 West Springfield town, MA
 Wilbraham town, MA
 Hampshire County, MA (part)
 Amherst town, MA
 Belchertown town, MA
 Easthampton town, MA
 Granby town, MA
 Hadley town, MA
 Hatfield town, MA
 Huntington town, MA
 Northampton city, MA
 Southampton town, MA
 South Hadley town, MA
 Ware town, MA
 Williamsburg town, MA

Stamford–Norwalk, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**State College, PA MSA**
Centre County, PA**Steubenville–Weirton, OH–WV MSA**

Jefferson County, OH
 Brooke County, WV
 Hancock County, WV

Stockton–Lodi, CA MSA
San Joaquin County, CA**Sumter, SC MSA**
Sumter County, SC**Syracuse, NY MSA**
Cayuga County, NY
Madison County, NY
Onondaga County, NY
Oswego County, NY**Tacoma, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA****Tallahassee, FL MSA**
Gadsden County, FL
Leon County, FL**Tampa–St. Petersburg–Clearwater, FL MSA**
Hernando County, FL
Hillsborough County, FL
Pasco County, FL
Pinellas County, FL**Terre Haute, IN MSA**
Clay County, IN
Vermillion County, IN
Vigo County, IN**Texarkana, TX–Texarkana, AR MSA**
Miller County, AR
Bowie County, TX**Toledo, OH MSA**

Fulton County, OH
 Lucas County, OH
 Wood County, OH

Topeka, KS MSA
Shawnee County, KS**Trenton, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****Tucson, AZ MSA**
Pima County, AZ**Tulsa, OK MSA**
Creek County, OK
Osage County, OK
Rogers County, OK
Tulsa County, OK
Wagoner County, OK**Tuscaloosa, AL MSA**
Tuscaloosa County, AL**Tyler, TX MSA**
Smith County, TX**Utica–Rome, NY MSA**
Herkimer County, NY
Oneida County, NY**Vallejo–Fairfield–Napa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA****Ventura, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA****Victoria, TX MSA**
Victoria County, TX**Vineland–Millville–Bridgeton, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Visalia–Tulare–Porterville, CA MSA**
Tulare County, CA**Waco, TX MSA**
McLennan County, TX**Washington, DC–MD–VA–WV PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA****Washington–Baltimore, DC–MD–VA–WV CMSA**
Baltimore, MD PMSA
Anne Arundel County, MD
Baltimore County, MD
Carroll County, MD
Harford County, MD
Howard County, MD
Queen Anne's County, MD
Baltimore city, MD
Hagerstown, MD PMSA
Washington County, MD
Washington, DC–MD–VA–WV PMSA
District of Columbia, DC
Calvert County, MD
Charles County, MD
Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA**Washington–Baltimore, DC–MD–VA–WV CMSA—Con.**

Washington, DC–MD–VA–WV PMSA—Con.
 Fauquier County, VA
 King George County, VA
 Loudoun County, VA
 Prince William County, VA
 Spotsylvania County, VA
 Stafford County, VA
 Warren County, VA
 Alexandria city, VA
 Fairfax city, VA
 Falls Church city, VA
 Fredericksburg city, VA
 Manassas city, VA
 Manassas Park city, VA
 Berkeley County, WV
 Jefferson County, WV

Waterbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Waterloo–Cedar Falls, IA MSA**
Black Hawk County, IA**Wausau, WI MSA**
Marathon County, WI**West Palm Beach–Boca Raton, FL MSA**
Palm Beach County, FL**Wheeling, WV–OH MSA**
Belmont County, OH
Marshall County, WV
Ohio County, WV**Wichita, KS MSA**
Butler County, KS
Harvey County, KS
Sedgwick County, KS**Wichita Falls, TX MSA**
Archer County, TX
Wichita County, TX**Williamsport, PA MSA**
Lycoming County, PA**Wilmington–Newark, DE–MD PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Wilmington, NC MSA**
Brunswick County, NC
New Hanover County, NC**Worcester, MA–CT PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****Yakima, WA MSA**
Yakima County, WA**Yolo, CA PMSA—see Sacramento–Yolo, CA CMSA****York, PA MSA**
York County, PA**Youngstown–Warren, OH MSA**
Columbiana County, OH
Mahoning County, OH
Trumbull County, OH**Yuba City, CA MSA**
Sutter County, CA
Yuba County, CA**Yuma, AZ MSA**
Yuma County, AZ

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

- Printed reports [P]
- CD-ROM [C]
- Highlights online [+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through January 1996) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available March 1996 through May 1996) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available November 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

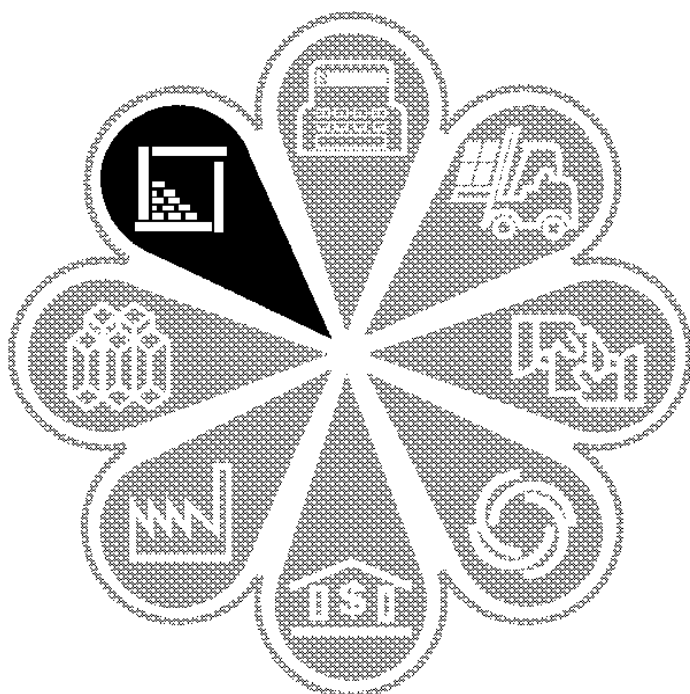
Census of Construction Industries

CC92-A-4

GEOGRAPHIC AREA SERIES

West North Central States

Iowa, Kansas, Minnesota, Missouri,
Nebraska, North Dakota, South Dakota



Acknowledgments

Many persons participated in the various activities of the 1992 Census of Construction Industries. The overall planning and review of the census operations were performed by the Economic Census Staff of the Economic Planning and Coordination Division.

This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Tamara A. Cole**, **Jennifer L. Evans**, **Susan L. Hostetter**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke** and **Michael E. Kornbau**. The Systems Support Staff maintained the small computers and assisted in the management of computer output.

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If you have any questions concerning the statistics in this report, call 301-457-4680.

1992

Census of

Construction Industries

CC92-A-4

GEOGRAPHIC AREA SERIES

West North Central

States

Iowa, Kansas, Minnesota, Missouri,
Nebraska, North Dakota, South Dakota

Issued May 1996



U.S. Department of Commerce
Michael Kantor, Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director



**Economics and Statistics
Administration**

Everett M. Ehrlich, Under Secretary
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DIVISION**

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David W. Cartwright, Chief

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

IV INTRODUCTION

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

CONSTRUCTION—GEOGRAPHIC AREA SERIES

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Assets and depreciation (gross book value):					
Beginning of year—buildings, machinery, and equipment	4				
End of year—total	2, 4	2	6	7	
End of year—buildings, machinery, and equipment	4				
Depreciation charges during year—buildings, machinery, and equipment	4				
Capital expenditures:					
Total capital expenditures	2, 4	2	6	7	11
New buildings—machinery and equipment	4				
Used buildings—machinery and equipment	4				
Communication services, costs for	3				
Employees:					
All employees—average number	1, 2, 3	2	6	7	11
Construction workers—average number	2, 3, 9	2, 9			
Construction workers—quarterly	3, 9	9			
Other employees—average number	3				
Other employees—quarterly	3				
Establishments:					
Number in business during year:					
All	1				
With payroll	1, 2, 3, 5, 9	2, 9	6	7	11
Without payroll	1				
Fringe benefits—legally required and voluntary expenditures	3				
Inventories	5				
Materials, components, supplies, and fuels—costs for	2, 3	2	6	7	11
Ownership—private or government owned	3				
Payroll:					
First-quarter, all employees	3				
Annual:					
All employees	2, 3	2	6	7	11
Construction workers	2, 3	2			
Other employees	3				
Power, fuels, and lubricants—costs for	3				
Proprietors and working partners:					
All establishments	1				
Establishments with payroll	1, 3				
Establishments without payroll	1				
Ratios, selected industry	10	10			
Receipts and value:					
Dollar value of business done:					
All establishments	1				
Establishments with payroll	1, 3		6	7	
Establishments without payroll	1				
Value of construction work, total	2, 3, 5, 8	2	6	7	11
For work subcontracted in from others	2, 3	2			
Other business receipts	3				

See footnotes at end of table.

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Receipts and value:—Con.					
Net value of construction work.	2, 3	2	6	7	11
Value added.	2, 3	2	6	7	11
Rental costs:					
Total.	2, 3	2	6	7	
For machinery and equipment.	3				
For buildings.	3				
Repairs to buildings and other structures.	3				
Repairs to machinery and equipment.	3				
Subcontract work to others, costs for.	2, 3	2	6	7	11
Type and class of construction ²	8				

Note: Data for 1987 and earlier years are also available in some of these tables.

¹CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan statistical area.

²Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.



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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Iowa. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 23,828 establishments in this State operating in the construction industries. These establishments accounted for \$5.7 billion in total dollar value of business done.

Most of the 23,828 construction establishments were small. Of the total, 17,121 were nonemployers, and over half of the employer establishments had less than 5 employees. The 2,564 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 79 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$5.2 billion in total dollar value of business done. Of this amount, \$5.1 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.2 billion, leaving net value of construction work of \$3.9 billion. In addition, these establishments paid out \$2.0 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$2.3 billion. (See Introduction and appendixes for explanation of terms.)

There were 6,707 establishments with total employment averaging 49,212 during the year. Total payroll for 1992 was \$1.1 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 17,121 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$439 million. Most of these establishments, about 85 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

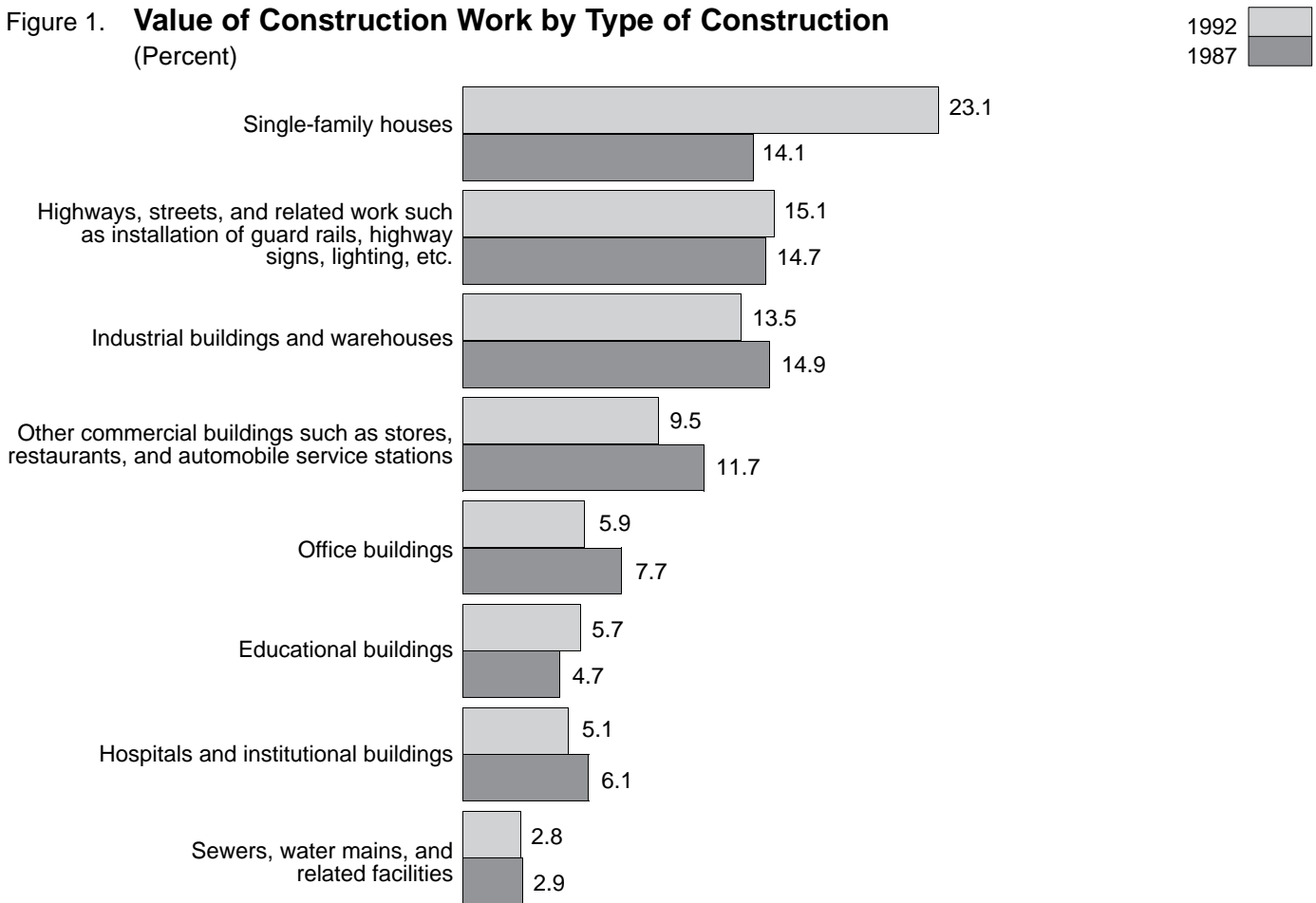


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

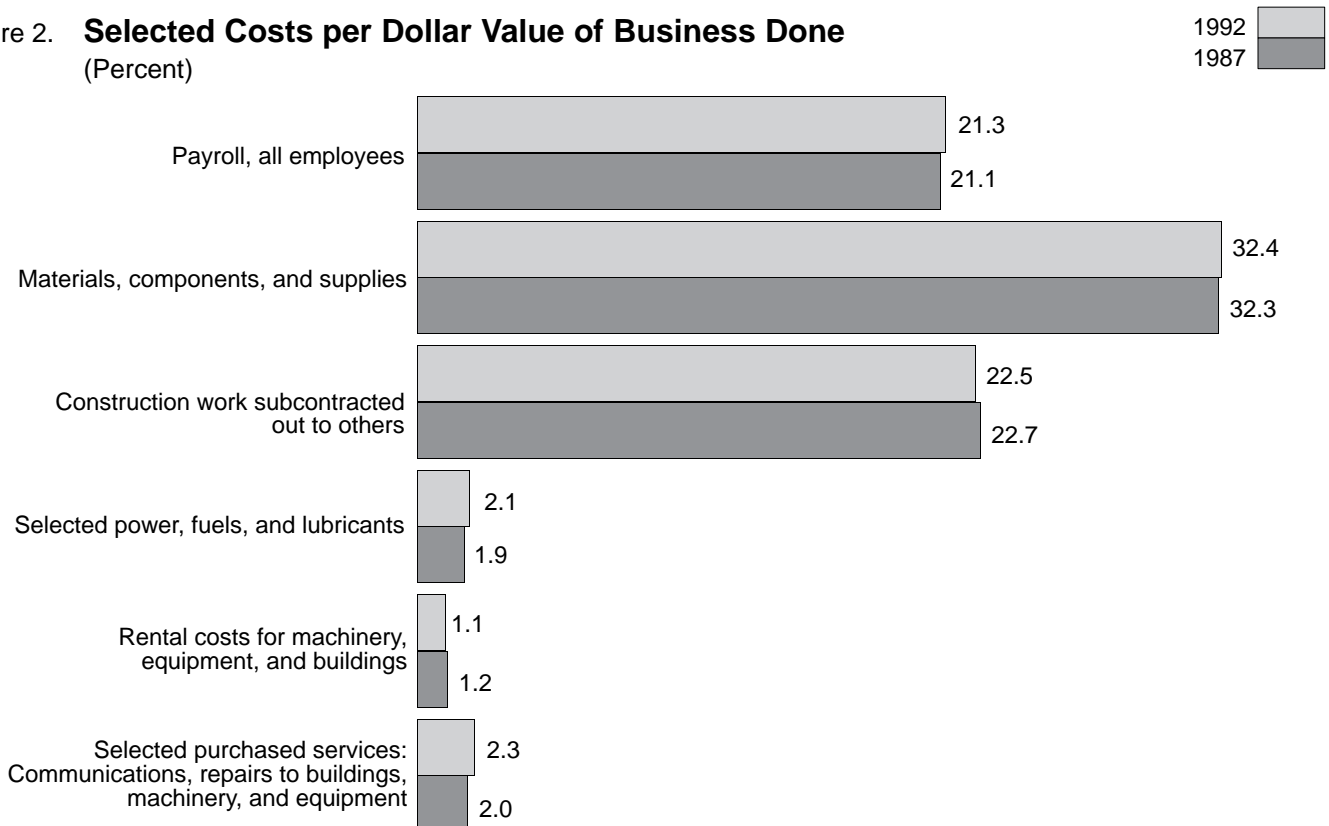


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	23 828	20 921	49 212	5 671 797	17 121	17 139	439 179	6 707	3 782	49 212	5 232 618	1	1
15	Building construction—General contractors and operative builders ----	4 176	3 294	12 193	2 074 216	2 294	2 248	134 298	1 882	1 046	12 193	1 939 918	2	3
16	Heavy construction other than building construction—contractors -----	965	553	8 629	1 141 814	304	286	9 668	661	267	8 629	1 132 146	2	1
17	Special trade contractors -----	18 687	17 074	28 390	2 455 766	14 523	14 605	295 213	4 164	2 469	28 390	2 160 553	1	1
1711	Plumbing, heating, and air-conditioning --	1 920	1 480	6 950	660 426	995	1 004	34 537	925	476	6 950	625 889	2	2
1731	Electrical work -----	1 514	1 190	4 349	370 183	1 007	1 004	25 008	507	186	4 349	345 175	4	2
	1987													
15, 16, 17	Construction industries² -----	23 699	19 889	37 825	4 013 077	18 389	18 195	582 160	5 310	1 694	37 825	3 430 917	1	1
15	Building construction—General contractors and operative builders ----	4 472	3 386	9 567	1 395 080	3 080	2 919	165 116	1 392	467	9 567	1 229 964	3	3
16	Heavy construction other than building construction—contractors -----	938	423	7 366	847 225	303	295	19 473	635	128	7 366	827 752	3	2
17	Special trade contractors -----	18 036	15 933	(D)	1 734 274	14 793	14 848	366 878	3 243	1 085	(D)	1 367 396	(D)	2
1711	Plumbing, heating, and air-conditioning --	1 997	1 487	5 079	438 100	1 198	1 211	53 859	799	276	5 079	384 241	3	3
1731	Electrical work -----	1 632	1 278	3 293	242 731	1 151	1 146	33 577	481	132	3 293	209 154	4	3

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	6 707	49 212	39 249	1 115 416	831 732	5 090 157	3 913 932	2 253 520
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	1 222	4 486	3 470	74 352	55 385	485 153	365 307	177 802
1522	Other residential buildings -----	67	322	232	5 523	3 785	*52 020	18 242	18 862
1531	Operative builders -----	107	396	220	10 541	4 161	168 164	84 371	38 929
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	110	1 578	1 280	38 546	29 051	190 922	132 283	62 040
1542	Nonresidential buildings, n.e.c. -----	376	5 411	4 156	136 732	94 430	997 100	481 435	259 204
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	158	5 031	4 301	130 529	104 682	752 552	579 143	295 600
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	28	794	673	18 554	14 493	73 159	61 951	24 399
1623	Water, sewer, and utility lines -----	105	1 110	927	33 202	25 519	132 853	115 291	89 268
1629	Heavy construction, n.e.c. -----	370	1 694	1 309	32 489	24 371	133 207	121 421	81 045
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	925	6 950	5 147	172 832	125 910	608 929	540 978	315 930
1721	Painting and paper hanging -----	362	1 509	1 324	26 071	21 427	73 411	69 025	51 306
1731	Electrical work -----	507	4 349	3 361	112 853	83 893	341 373	332 572	206 608
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	254	1 734	1 540	35 526	30 402	97 531	96 018	59 290
1742	Plastering, drywall, and insulation work -----	167	1 701	1 458	38 986	30 757	101 215	91 431	59 700
1743	Terrazzo, tile, marble, and mosaic work -----	43	174	147	3 882	3 046	15 584	13 711	8 294
175	Carpentry and floor work:								
1751	Carpentry -----	568	2 127	1 805	34 325	28 879	137 770	121 411	72 562
1752	Floor laying and other floor work -----	124	352	281	6 855	4 803	26 321	25 345	14 084
1761	Roofing, siding, and sheet metal work -----	398	3 368	2 663	69 752	48 193	243 301	232 115	136 970
1771	Concrete work -----	381	2 630	2 261	59 389	44 516	218 606	205 346	116 949
1781	Water well drilling -----	36	183	130	4 122	3 046	15 146	14 416	8 692
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	24	451	377	11 542	9 630	23 250	(D)	17 855
1793	Glass and glazing work -----	21	187	116	4 535	2 840	16 623	16 212	8 956
1794	Excavation work -----	111	601	494	12 585	9 905	57 945	54 563	38 774
1795	Wrecking and demolition work -----	*32	143	120	2 869	2 259	12 657	(D)	7 898
1796	Installing building equipment, n.e.c. -----	54	663	518	16 437	12 574	50 777	46 340	36 842
1799	Special trade contractors, n.e.c. -----	157	1 270	940	22 387	13 776	64 589	60 378	45 662

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
1 802 873	1 176 225	1 194 928	59 396	115 200	1 023 397	37 825	3 341 668	1 468 040	1	1	5	15, 16, 17
												15
198 342	119 847	23 115	3 169	9 132	36 982	2 219	183 432	70 525	5	7	17	152
5 049	*33 778	(S)	*207	202	*5 801	472	59 658	15 625	23	20	11	1521
48 965	83 792	472	229	660	4 958	519	(D)	19 912	15	12	31	1531
72 422	58 639	(S)	1 685	1 429	15 248	1 585	149 205	54 356	7	7	18	154
246 582	515 664	16 907	6 087	8 525	79 282	4 792	719 968	187 575	4	2	14	1542
												16
311 987	173 409	122 042	11 818	30 884	338 597	3 798	475 127	215 036	3	2	10	1611
41 783	11 208	7 238	482	4 126	31 919	1 019	112 782	42 378	5	5	20	162
28 739	17 562	35 081	5 351	*7 993	68 065	1 040	100 392	58 734	5	4	42	1622
45 360	11 786	17 538	2 728	7 367	62 465	1 509	115 815	64 620	10	10	23	1623
												17
242 009	67 951	267 453	7 572	12 475	83 779	5 079	369 059	185 324	2	2	13	1711
18 138	*4 386	26 892	511	1 697	13 907	1 108	47 478	36 196	8	8	24	1721
129 765	8 801	158 772	4 116	5 411	49 612	3 293	206 954	113 136	4	2	10	1731
37 110	1 512	85 794	865	2 561	27 298	1 203	54 740	35 000	6	6	20	174
34 134	9 784	76 793	1 405	(S)	10 633	1 151	68 217	38 163	6	6	(S)	1742
5 584	1 872	8 727	51	*439	1 496	237	13 133	5 432	11	11	63	1743
54 340	16 359	39 885	(S)	1 420	16 598	1 049	67 038	35 049	9	9	39	175
12 118	977	13 574	236	*622	3 242	191	11 905	8 244	10	9	60	1752
100 162	11 186	77 248	3 915	3 704	42 474	2 376	169 334	88 071	6	4	10	1761
97 787	13 260	124 173	4 916	9 015	62 674	2 319	159 876	84 333	6	4	12	1771
6 096	730	691	122	804	8 402	203	14 441	5 733	11	17	30	1781
(D)	(D)	20 578	570	*927	6 223	369	15 548	14 160	4	(D)	44	179
9 304	410	7 748	254	298	2 610	226	(D)	8 381	11	13	6	1791
15 871	3 382	25 850	(S)	(S)	18 840	436	30 189	21 169	15	17	(S)	1793
(D)	(D)	1 502	107	79	1 733	*122	5 039	3 906	25	(D)	(Z)	1794
11 225	4 437	7 631	710	869	7 522	682	45 644	28 595	6	6	(Z)	1795
19 303	4 211	23 852	933	1 802	(S)	748	39 570	26 120	10	9	22	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	6 707	5 310	6 499	8 347	1	1	2	3
Proprietors and working partners	3 782	1 694	2 869	5 269	2	6	3	4
All employees**	49 212	37 825	40 894	55 979	1	1	2	1
Construction workers:								
March	32 254	24 096	25 433	38 154	1	2	2	1
May	42 072	30 578	32 650	48 864	1	1	2	1
August	44 409	34 549	37 925	54 858	1	1	2	1
November	38 261	31 202	33 801	48 664	1	1	2	1
Average	39 249	30 106	33 137	47 677	1	1	2	1
Other employees:								
March	9 904	7 708	7 648	7 906	2	2	2	2
May	9 958	7 627	(NA)	(NA)	1	2	(NA)	(NA)
August	9 995	7 770	(NA)	(NA)	2	2	(NA)	(NA)
November	9 994	7 780	(NA)	(NA)	2	2	(NA)	(NA)
Average	9 963	7 721	(NA)	(NA)	1	2	(NA)	(NA)
Payroll, all employees	1 115 416	723 405	666 558	682 118	1	1	1	1
Payroll, construction workers	831 732	546 378	504 791	547 251	1	1	1	1
Payroll, other employees	283 684	177 027	161 767	134 867	1	1	1	1
First-quarter payroll, all employees	222 902	140 514	134 334	130 073	1	1	1	1
Fringe benefits, all employees	269 225	155 406	122 048	105 966	1	1	1	1
Legally required expenditures	175 871	110 038	88 127	67 343	1	1	2	1
Voluntary expenditures	93 354	45 368	33 921	38 623	2	2	2	1
Dollar value of business done	5 232 618	3 430 917	2 741 774	2 828 733	1	1	1	1
Value of construction work	5 090 157	3 341 668	2 658 633	2 745 982	1	1	1	1
Value of construction work subcontracted in from others	1 194 928	636 933	492 676	531 316	3	3	7	(Z)
Other business receipts	142 461	76 725	63 505	82 750	4	4	4	4
Net value of construction†	3 913 932	2 564 452	2 121 572	2 254 428	1	1	1	1
Value added††	2 253 520	1 468 040	1 203 575	1 210 329	1	1	1	1
Selected costs	2 979 098	1 950 353	1 518 563	1 599 890	2	1	1	1
Materials, components, and supplies	1 694 867	1 107 053	911 196	1 051 369	2	1	2	1
Construction work subcontracted out to others	1 176 225	777 216	537 060	491 554	3	2	2	2
Selected power, fuels, and lubricants	108 006	66 083	70 306	56 967	2	2	2	1
Electricity	14 761	6 930	7 578	5 037	4	3	3	3
Natural gas	6 765	3 546	4 860	2 782	3	4	5	4
Gasoline and diesel fuel	79 795	50 702	53 036	42 297	2	2	2	1
On highway use	56 140	34 303	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use	23 654	16 398	(NA)	(NA)	4	5	(NA)	(NA)
Other, including lubricating oils and greases	6 685	4 904	4 831	6 856	4	4	7	4
Rental cost for machinery, equipment, and buildings	59 396	42 038	32 790	31 341	4	4	3	2
For machinery and equipment	40 117	29 502	24 360	26 428	4	5	3	3
For buildings	19 279	12 536	8 429	4 914	6	4	4	3
Selected purchased services	117 770	67 618	57 989	60 321	3	3	2	2
Communication services	23 665	13 322	13 185	11 200	4	5	2	2
Repairs to buildings and other structures	6 643	3 279	3 239	2 822	7	7	5	6
Repairs to machinery and equipment	87 462	51 016	41 565	46 299	3	4	2	2
Ownership of construction projects:								
Value of construction work	5 090 157	3 341 668	2 658 633	2 745 982	1	1	1	1
Government owned	1 529 764	980 078	738 395	637 309	3	2	3	1
Federal	271 011	340 274	(NA)	(NA)	6	3	(NA)	(NA)
State and local	1 258 753	639 804	(NA)	(NA)	3	3	(NA)	(NA)
Privately owned	3 560 393	2 361 590	1 920 237	2 108 674	2	2	2	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	941 102	637 397	4	3
Capital expenditures, other than land -----	115 200	66 685	5	4
New -----	87 017	44 807	6	4
Used -----	28 184	21 877	8	7
Retirements and disposition of depreciable assets -----	32 905	31 995	10	10
End-of-year gross book value of depreciable assets -----	1 023 397	672 087	3	3
Depreciation charges during year -----	105 503	68 889	4	4
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	127 298	146 702	6	6
Capital expenditures, other than land -----	13 726	10 341	14	8
New buildings and other structures -----	9 626	6 743	15	8
Used buildings and other structures -----	4 101	3 598	33	16
Retirements and disposition of depreciable assets -----	2 793	4 470	18	12
End-of-year gross book value of depreciable assets -----	138 232	152 574	6	6
Depreciation charges during year -----	9 165	10 639	6	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	813 804	490 694	4	3
Capital expenditures, other than land -----	101 474	56 344	5	4
New machinery and equipment, including automobiles and trucks -----	77 391	38 064	6	4
New automobiles and trucks, intended primarily for highway use -----	32 122	17 913	6	6
Used machinery and equipment, including automobiles and trucks -----	24 083	18 279	7	8
Retirements and disposition of depreciable assets -----	30 113	27 525	11	11
End-of-year gross book value of depreciable assets -----	885 166	519 513	4	3
Depreciation charges during year -----	96 338	58 249	4	5

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	6 707	1
Value of construction work	5 090 157	1
Establishments with inventories:		
Number	2 534	3
Value of construction work	2 511 333	1
Inventories ¹ :		
End of 1992, materials and supplies	73 756	5
End of 1991, materials and supplies	72 696	5
Establishments with no inventories:		
Number	2 118	3
Value of construction work	1 816 550	2
Establishments not reporting:		
Number	2 055	3
Value of construction work	762 274	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	6 707	4 143	1 421	668	325	107	39	4	—	—
All employees** -----	49 212	8 209	8 834	8 654	9 760	7 087	5 248	1 421	—	—
Payroll, all employees -----	1 115 416	117 791	158 491	195 694	251 923	200 172	160 172	31 174	—	—
Dollar value of business done -----	5 232 618	731 956	663 873	825 758	1 085 338	804 514	867 846	253 333	—	—
Value of construction work -----	5 090 157	721 260	647 314	799 249	1 049 714	780 869	860 459	231 292	—	—
Net value of construction work† -----	3 913 932	593 884	556 850	639 441	833 047	597 093	<u>693 617</u>	(D)	—	—
Value added†† -----	2 253 520	308 122	333 755	381 118	501 826	332 816	<u>395 882</u>	(D)	—	—
Cost of materials, components, supplies, and fuels -----	1 802 873	296 457	239 654	284 832	366 844	287 922	<u>246 004</u>	81 159	—	—
Cost of construction work subcontracted out to others -----	1 176 225	127 376	90 464	159 807	216 668	183 776	<u>398 134</u>	(D)	—	—
Rental cost for machinery, equipment, and buildings -----	59 396	7 367	7 016	8 579	14 197	9 095	<u>13 142</u>	(D)	—	—
Capital expenditures, other than land -----	115 200	15 321	15 457	24 232	24 939	17 358	<u>17 893</u>	(D)	—	—
End-of-year gross book value of depreciable assets -----	1 023 397	94 899	155 456	203 456	207 041	151 429	<u>211 116</u>	(D)	—	—
1987										
All employees** -----	37 825	6 405	7 918	6 533	7 757	4 454	<u>4 755</u>	(D)	(D)	—
Value of construction work -----	3 341 668	450 655	529 662	456 962	733 665	479 115	<u>691 607</u>	(D)	(D)	—
Value added†† -----	1 468 040	209 758	252 415	242 782	334 304	212 242	<u>216 537</u>	(D)	(D)	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	4	6	6	3	(Z)	(Z)	(Z)	—	—
Net value of construction work† -----	1	5	6	6	2	(Z)	(Z)	(D)	—	—
Capital expenditures, other than land -----	5	16	14	16	13	(Z)	(Z)	(D)	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	6 707	(S)	(S)	872	2 054	1 293	748	505	192	113	71
All employees** -----	49 212	(S)	(S)	1 419	6 156	6 501	6 485	7 976	6 145	6 056	7 651
Payroll, all employees -----	1 115 416	(S)	(S)	15 581	82 154	109 115	129 860	195 818	156 664	178 405	240 585
Dollar value of business done -----	5 232 618	(S)	(S)	63 492	333 238	458 166	521 715	787 038	663 669	774 721	1 606 036
Value of construction work -----	5 090 157	(S)	(S)	62 920	328 366	448 951	507 864	771 437	644 548	748 692	1 553 125
Net value of construction work† -----	3 913 932	(S)	(S)	60 222	305 104	404 918	436 813	650 333	529 880	558 560	945 540
Value added†† -----	2 253 520	(S)	(S)	36 300	182 850	229 363	255 142	372 719	321 699	324 472	516 909
Cost of materials, components, supplies, and fuels -----	1 802 873	(S)	(S)	24 494	127 127	184 770	195 523	293 216	227 302	260 116	481 542
Cost of construction work subcontracted out to others -----	1 176 225	(S)	(S)	(S)	23 261	44 033	71 051	121 103	114 668	190 133	607 585
Rental cost for machinery, equipment, and buildings -----	59 396	(S)	(S)	690	4 059	5 873	6 108	8 665	8 871	7 717	17 029
Capital expenditures, other than land -----	115 200	(S)	(S)	(S)	10 329	13 003	11 671	23 493	15 865	12 895	26 455
End-of-year gross book value of depreciable assets -----	1 023 397	(S)	(S)	12 828	83 605	91 756	80 614	213 513	127 270	130 693	279 288
1987											
All employees** -----	37 825	(S)	(S)	(S)	5 510	4 927	5 677	5 962	4 391	3 744	5 237
Value of construction work -----	3 341 668	(S)	(S)	(S)	264 102	298 400	409 676	496 325	439 057	448 157	909 078
Value added†† -----	1 468 040	(S)	(S)	(S)	141 319	153 038	207 580	250 308	205 785	190 302	275 606
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	9	6	7	7	4	1	1	(Z)
Net value of construction work† -----	1	(S)	(S)	8	6	7	7	5	3	3	(Z)
Capital expenditures, other than land -----	5	(S)	(S)	(S)	19	18	16	16	19	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	5 090 157	3 092 245	1 199 611	633 487	1	2	2	2
Building construction	3 633 976	2 263 583	936 833	433 560	2	2	2	3
Single-family houses	1 173 557	801 210	236 645	135 702	4	6	5	6
Single-family houses, detached	1 078 129	730 671	220 181	127 278	5	7	6	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	95 428	70 540	16 465	8 424	7	8	12	9
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	126 216	76 871	31 100	18 245	8	6	27	10
Other residential buildings, including hotels, motels, and tourist cabins	49 326	29 117	14 618	5 591	12	15	18	7
Office buildings	301 265	182 180	87 943	31 142	2	2	4	5
Other commercial buildings such as stores, restaurants, and automobile service stations	484 160	300 148	129 943	54 068	2	2	4	4
Industrial buildings and warehouses	687 252	381 729	185 710	119 813	2	2	3	4
Industrial buildings	550 724	284 286	158 981	107 456	2	3	2	4
Warehouses	136 529	97 443	26 729	12 357	4	4	10	10
Religious buildings	54 688	29 764	15 322	9 603	9	14	8	11
Educational buildings	290 981	172 938	94 984	23 059	2	2	3	6
Hospitals and institutional buildings	260 574	138 909	107 387	14 277	3	5	5	7
Farm buildings, nonresidential	113 704	83 369	14 894	15 441	7	9	13	9
Amusement, social, and recreational buildings, indoors	40 218	33 112	4 111	2 995	3	2	9	18
Other nonresidential buildings	52 035	34 234	14 176	3 625	15	12	26	28
Nonbuilding construction	1 291 368	828 662	262 778	199 928	1	2	4	5
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	766 360	446 279	185 610	134 471	1	2	3	7
Private driveways and parking areas	57 048	40 933	8 969	(S)	10	8	20	(S)
Bridges, tunnels, and elevated highways	80 589	65 643	8 155	6 791	5	6	17	2
Conservation and development construction	59 349	40 839	(S)	6 254	13	14	(S)	24
Power and communication transmission lines, towers, and related facilities	44 558	36 597	3 995	3 966	9	11	9	10
Sewers, water mains, and related facilities	143 494	113 859	15 251	14 384	5	5	14	9
Sewers, sewer lines, septic systems, and related facilities	79 747	62 290	8 885	8 572	5	5	15	7
Water mains and related facilities	63 747	51 569	6 366	5 813	6	6	15	18
Other nonbuilding construction	139 970	84 512	28 542	26 916	5	5	14	13
Construction work, n.s.k.	164 814	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
1987								
Value of construction work	3 341 668	1 994 555	775 548	479 348	1	2	2	3
Building construction	2 309 218	1 427 705	585 882	294 482	2	2	2	4
Single-family houses	470 344	285 336	92 858	92 149	6	9	7	9
Single-family houses, detached	430 505	257 680	86 770	86 055	6	10	7	9
Single-family houses, attached, including townhouses and townhouse-type condominiums	39 838	27 656	6 087	6 094	15	19	23	25
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	84 187	59 285	12 119	12 781	9	11	10	9
Other residential buildings, including hotels, motels, and tourist cabins	86 919	52 071	25 358	9 489	5	4	13	10
Office buildings	258 565	163 606	70 072	24 886	2	2	5	4
Other commercial buildings such as stores, restaurants, and automobile service stations	391 308	238 686	123 600	29 022	3	4	4	7
Industrial buildings and warehouses	496 901	299 314	127 159	70 428	2	2	4	6
Industrial buildings	378 965	211 339	108 817	58 808	2	2	4	7
Warehouses	117 936	87 974	18 342	11 620	5	6	10	11
Religious buildings	32 976	15 262	11 541	6 172	6	10	7	13
Educational buildings	158 111	87 844	52 610	17 656	5	5	11	7
Hospitals and institutional buildings	204 993	143 469	51 194	10 329	3	3	7	10
Farm buildings, nonresidential	82 875	58 537	9 577	14 760	8	10	15	14
Other nonresidential buildings	42 039	24 965	9 794	7 289	13	20	3	10
Nonbuilding construction	940 232	566 179	189 665	184 387	2	2	4	6
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	492 295	260 505	125 015	106 774	2	3	4	6
Private driveways and parking areas	43 345	30 097	3 712	9 534	10	5	21	40
Bridges, tunnels, and elevated highways	103 188	76 731	19 891	6 564	3	4	2	2
Conservation and development construction	37 083	24 872	4 449	* 7 762	18	19	38	42
Power and communication transmission lines, towers, and related facilities	16 169	12 868	2 004	1 296	24	22	33	40
Sewers, water mains, and related facilities	98 008	78 147	9 986	9 874	8	8	22	23
Sewers, sewer lines, septic systems, and related facilities	56 157	45 076	7 004	4 076	10	11	18	19
Water mains and related facilities	41 851	33 071	2 981	5 798	10	10	33	35
Other nonbuilding construction	150 144	82 959	24 608	42 583	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	92 217	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	6 707	39 249	32 254	42 072	44 409	38 261	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	1 222	3 470	3 018	3 503	3 989	3 371	4	6	6	6	6	6
1522	Other residential buildings -----	67	232	207	264	240	216	25	23	21	27	22	28
1531	Operative builders -----	107	220	195	237	251	196	19	23	22	24	21	20
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	110	1 280	1 178	1 216	1 362	1 364	16	7	6	6	7	8
1542	Nonresidential buildings, n.e.c. -----	376	4 156	3 669	4 172	4 620	4 163	9	4	4	4	4	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	158	4 301	1 909	6 260	5 301	3 735	10	3	3	2	3	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	28	673	492	716	762	723	16	5	8	6	5	5
1623	Water, sewer, and utility lines -----	105	927	583	1 032	1 166	925	13	5	8	5	4	6
1629	Heavy construction, n.e.c. -----	370	1 309	1 079	1 499	1 414	1 244	7	11	11	11	12	12
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	925	5 147	4 812	5 349	5 342	5 085	3	2	2	2	2	2
1721	Painting and paper hanging -----	362	1 324	1 171	1 353	1 561	1 214	5	8	10	8	7	9
1731	Electrical work -----	507	3 361	3 286	3 289	3 588	3 280	5	4	4	4	4	3
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	254	1 540	1 343	1 383	1 872	1 562	7	6	7	7	7	7
1742	Plastering, drywall, and insulation work -----	167	1 458	1 313	1 444	1 602	1 472	10	6	6	6	6	6
1743	Terrazzo, tile, marble, and mosaic work -----	43	147	137	147	149	156	25	13	13	12	14	12
175	Carpentry and floor work:												
1751	Carpentry -----	568	1 805	1 673	1 927	1 932	1 689	6	9	9	11	8	10
1752	Floor laying and other floor work -----	124	281	297	294	297	237	12	11	11	11	12	11
1761	Roofing, siding, and sheet metal work -----	398	2 663	2 233	2 639	3 106	2 673	7	6	6	6	6	7
1771	Concrete work -----	381	2 261	1 432	2 590	2 782	2 239	6	6	7	7	6	6
1781	Water well drilling -----	36	130	133	133	132	121	16	12	11	11	11	11
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	24	377	369	349	383	408	20	5	(Z)	3	10	4
1793	Glass and glazing work -----	21	116	115	116	112	123	18	14	14	14	15	16
1794	Excavation work -----	111	494	320	537	590	530	16	16	17	15	16	18
1795	Wrecking and demolition work -----	*32	120	91	152	138	97	40	25	29	26	25	31
1796	Installing building equipment, n.e.c. -----	54	518	444	480	593	555	6	6	6	5	8	4
1799	Special trade contractors, n.e.c. -----	157	940	757	992	1 125	884	13	10	9	10	11	11

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	7.3	22.7	129.7	.219	.354	.231	.235	.012
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.7	16.6	139.8	.153	.409	.247	.048	.007
1522	Other residential buildings -----	4.8	17.2	224.2	.106	*.097	.649	(S)	*.004
1531	Operative builders -----	3.7	26.6	764.4	.063	.291	.498	.003	.001
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	14.3	24.4	149.2	.202	.379	.307	(S)	.009
1542	Nonresidential buildings, n.e.c. -----	14.4	25.3	239.9	.137	.247	.517	.017	.006
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	31.9	25.9	175.0	.173	.415	.230	.162	.016
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	28.0	23.4	108.7	.254	.571	.153	.099	.007
1623	Water, sewer, and utility lines -----	10.5	29.9	143.3	.250	.216	.132	.264	.040
1629	Heavy construction, n.e.c. -----	4.6	19.2	101.8	.244	.341	.088	.132	.020
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	7.5	24.9	118.3	.284	.397	.112	.439	.012
1721	Painting and paper hanging -----	4.2	17.3	55.4	.355	.247	*.060	.366	.007
1731	Electrical work -----	8.6	25.9	101.6	.331	.380	.026	.465	.012
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6.8	20.5	63.3	.364	.380	.016	.880	.009
1742	Plastering, drywall, and insulation work -----	10.2	22.9	69.4	.385	.337	.097	.759	.014
1743	Terrazzo, tile, marble, and mosaic work -----	4.0	22.3	106.0	.249	.358	.120	.560	.003
175	Carpentry and floor work:								
1751	Carpentry -----	3.7	16.1	76.3	.249	.394	.119	.290	(S)
1752	Floor laying and other floor work -----	2.8	19.5	93.7	.260	.460	.037	.516	.009
1761	Roofing, siding, and sheet metal work -----	8.5	20.7	91.4	.287	.412	.046	.317	.016
1771	Concrete work -----	6.9	22.6	96.7	.272	.447	.061	.568	.022
1781	Water well drilling -----	5.1	22.5	116.5	.272	.402	.048	.046	.008
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	19.0	25.6	61.7	.496	(D)	(D)	.885	.025
1793	Glass and glazing work -----	8.9	24.3	143.3	.273	.560	.025	.466	.015
1794	Excavation work -----	5.4	20.9	117.3	.217	.274	.058	.446	(S)
1795	Wrecking and demolition work -----	4.5	20.1	105.5	.227	(D)	(D)	.119	.008
1796	Installing building equipment, n.e.c. -----	12.4	24.8	98.0	.324	.221	.087	.150	.014
1799	Special trade contractors, n.e.c. -----	8.1	17.6	68.7	.347	.299	.065	.369	.014

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	OMAHA, NE-IA MSA											
15,16,17	Construction industries	1 793	14 711	354 345	1 933 644	1 465 442	809 972	683 552	468 202	29 574	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	877	15 245	87 468	(D)	33 086	33 441	(D)	1 121	10	(D)
1522	Other residential buildings	(S)	(S)	2 979	15 572	8 611	6 787	1 825	6 961	371	(S)	22
1531	Operative builders	68	368	10 985	184 465	116 770	50 713	68 489	67 694	812	15	10
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	37	501	17 606	127 666	81 492	39 920	42 338	46 175	1 426	10	4
1542	Nonresidential buildings, n.e.c.	107	1 051	23 730	182 799	80 154	35 103	47 911	102 645	1 752	9	8
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	38	1 146	31 217	176 821	140 376	72 430	68 151	36 444	5 237	10	14
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	52	745	22 116	140 374	115 553	30 053	86 563	24 821	1 705	11	7
1629	Heavy construction, n.e.c.	50	602	20 963	(D)	(D)	(D)	(D)	(D)	3 290	7	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	246	2 263	60 536	209 697	189 238	105 263	85 395	20 459	4 516	4	2
1721	Painting and paper hanging	124	718	12 540	34 215	32 152	24 074	8 113	2 063	*1 722	10	9
1731	Electrical work	136	1 232	32 837	96 211	94 154	56 863	38 604	2 056	1 099	4	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	84	630	11 227	34 760	27 597	20 396	10 532	*7 163	696	12	8
1742	Plastering, drywall, and insulation work	(S)	660	14 992	51 619	45 671	29 978	16 706	5 948	(S)	11	7
1743	Terrazzo, tile, marble, and mosaic work	14	56	(D)	4 156	4 156	2 850	1 397	—	56	10	9
175	Carpentry and floor work:											
1751	Carpentry	158	804	14 858	46 611	41 184	26 070	19 505	5 427	505	13	13
1752	Floor laying and other floor work	36	202	3 172	21 816	18 800	8 963	*9 890	*3 017	(S)	16	33
1761	Roofing, siding, and sheet metal work	48	674	13 093	48 667	43 877	23 214	20 811	4 790	191	9	4
1771	Concrete work	78	491	9 372	32 792	29 508	15 923	13 591	3 284	403	20	13
1781	Water well drilling	8	(D)	2 877	8 686	(D)	4 894	3 601	(D)	155	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	*18	186	4 828	9 735	(D)	(D)	(S)	(D)	(D)	23	(D)
1793	Glass and glazing work	(S)	108	1 991	7 906	7 813	4 206	3 911	93	161	2	3
1794	Excavation work	50	332	8 268	26 372	25 178	20 543	4 927	1 194	2 495	17	17
1795	Wrecking and demolition work	5	104	2 292	6 369	(D)	4 519	1 507	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c.	9	261	6 105	15 859	15 616	11 826	3 868	243	(D)	(Z)	(Z)
1799	Special trade contractors, n.e.c.	72	471	8 298	(D)	(D)	16 090	(D)	(D)	528	15	(D)

IA-14 IOWA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Contents

Kansas

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Kansas. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 19,259 establishments in this State operating in the construction industries. These establishments accounted for \$5.7 billion in total dollar value of business done.

Most of the 19,259 construction establishments were small. Of the total, 13,319 were nonemployers, and over half of the employer establishments had less than 5 employees. The 2,441 construction establishments with 5 employees or more, while representing only 13 percent of all establishments, accounted for more than 80 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$5.4 billion in total dollar value of business done. Of this amount, \$5.3 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.3 billion, leaving net value of construction work of \$3.9 billion. In addition, these establishments paid out \$2.0 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$2.2 billion. (See Introduction and appendixes for explanation of terms.)

There were 5,940 establishments with total employment averaging 47,936 during the year. Total payroll for 1992 was \$1.1 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 13,319 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$360 million. Most of these establishments, about 84 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

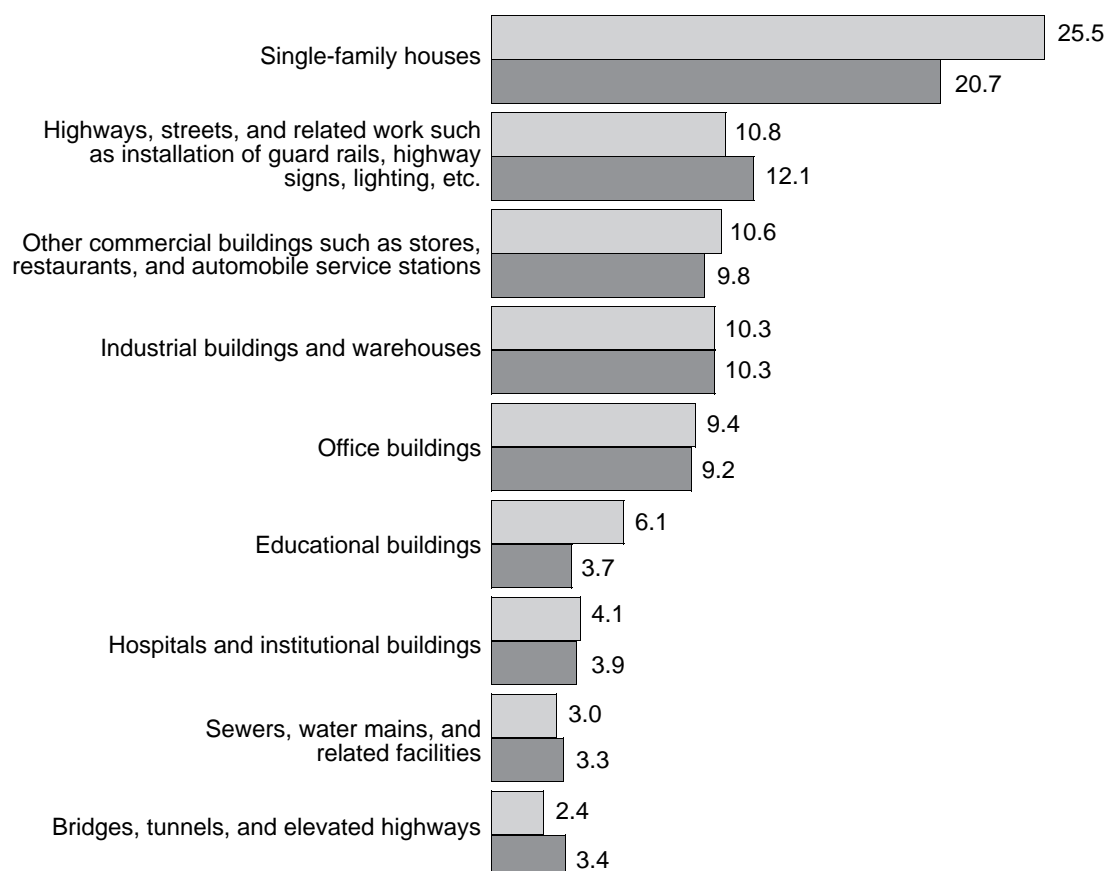


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

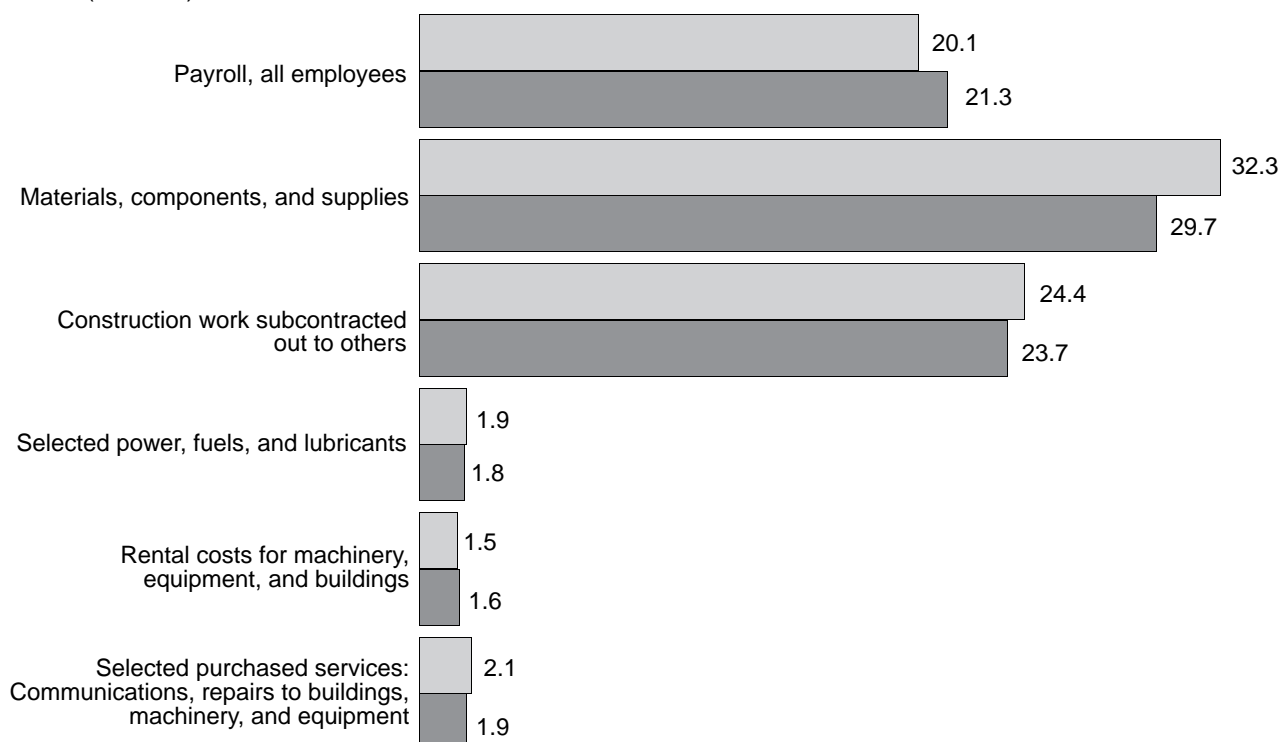


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	19 259	16 355	47 936	5 740 045	13 319	13 271	359 523	5 940	3 084	47 936	5 380 522	1	2
15	Building construction—General contractors and operative builders ----	3 376	2 509	11 171	2 442 541	1 828	1 745	132 369	1 548	764	11 171	2 310 172	3	4
16	Heavy construction other than building construction—contractors -----	943	586	10 733	1 156 402	309	304	11 038	634	282	10 733	1 145 364	2	1
17	Special trade contractors -----	14 939	13 260	26 032	2 141 102	11 182	11 222	216 116	3 757	2 038	26 032	1 924 986	1	2
1711	Plumbing, heating, and air-conditioning --	1 839	1 367	6 472	629 681	954	958	26 326	885	409	6 472	603 355	3	4
1731	Electrical work -----	1 140	861	3 687	309 645	695	693	15 021	445	168	3 687	294 624	3	3
	1987													
15, 16, 17	Construction industries² -----	22 547	18 842	46 042	5 192 132	16 940	16 843	716 924	5 607	1 999	46 042	4 475 208	1	2
15	Building construction—General contractors and operative builders ----	4 678	3 464	10 652	1 934 239	3 108	2 947	241 799	1 570	517	10 652	1 692 440	2	3
16	Heavy construction other than building construction—contractors -----	863	486	9 493	1 079 379	318	310	17 224	545	176	9 493	1 062 155	2	1
17	Special trade contractors -----	16 620	14 532	25 826	2 007 609	13 158	13 242	346 894	3 462	1 290	25 826	1 660 715	1	1
1711	Plumbing, heating, and air-conditioning --	2 106	1 525	5 811	461 149	1 259	1 277	48 796	847	248	5 811	412 353	3	3
1731	Electrical work -----	1 258	954	4 527	335 714	833	828	21 700	425	126	4 527	314 014	3	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	5 940	47 936	37 687	1 083 919	777 922	5 255 201	3 943 754	2 231 420
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	909	3 733	2 767	64 758	40 864	492 520	338 539	149 907
1522	Other residential buildings -----	53	560	481	12 966	9 114	64 641	41 628	20 875
1531	Operative builders -----	138	654	350	14 145	5 339	321 368	208 392	82 966
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	88	1 081	824	26 963	18 874	148 720	98 758	47 124
1542	Nonresidential buildings, n.e.c. -----	361	5 143	3 747	124 735	78 280	1 256 030	610 594	321 846
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction -----	135	4 244	3 484	102 295	74 510	486 382	375 575	216 885
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	18	918	805	23 629	19 039	106 140	81 227	41 804
1623	Water, sewer, and utility lines -----	202	3 075	2 547	79 274	61 326	267 873	237 708	171 826
1629	Heavy construction, n.e.c. -----	279	2 496	2 023	57 332	44 812	227 323	194 817	124 599
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	885	6 472	4 621	159 923	110 401	595 627	543 310	300 620
1721	Painting and paper hanging -----	312	1 334	1 171	23 698	19 227	63 385	60 301	44 627
1731	Electrical work -----	445	3 687	2 896	93 028	68 818	286 628	273 160	156 621
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	192	1 155	1 059	21 551	18 424	56 431	(D)	35 710
1742	Plastering, drywall, and insulation work -----	164	1 647	1 398	38 156	30 326	100 386	92 855	59 013
1743	Terrazzo, tile, marble, and mosaic work -----	28	179	157	4 148	3 155	12 841	12 751	7 547
175	Carpentry and floor work:								
1751	Carpentry -----	365	1 302	1 101	20 432	16 172	81 785	74 065	42 605
1752	Floor laying and other floor work -----	124	505	409	11 066	7 909	41 678	39 543	21 871
1761	Roofing, siding, and sheet metal work -----	376	3 084	2 444	58 733	42 116	208 000	196 348	119 461
1771	Concrete work -----	343	2 738	2 269	51 134	37 616	173 495	164 681	89 127
1781	Water well drilling -----	38	172	130	4 566	3 337	14 431	14 027	8 645
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	22	532	456	12 995	10 671	33 257	(D)	22 693
1793	Glass and glazing work -----	35	267	166	6 163	3 890	19 734	19 590	10 279
1794	Excavation work -----	81	433	358	10 745	7 841	36 220	32 269	23 073
1795	Wrecking and demolition work -----	13	55	48	775	599	3 546	3 325	2 717
1796	Installing building equipment, n.e.c. -----	64	1 132	916	31 937	24 272	79 920	(D)	61 461
1799	Special trade contractors, n.e.c. -----	270	1 339	1 060	28 773	20 990	76 837	70 552	47 517

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
1 837 656	1 311 447	1 226 873	81 892	114 434	941 220	46 042	4 291 125	1 958 207	1	2	4	15, 16, 17
												15
193 589	153 981	17 364	2 931	4 794	34 240	3 038	279 739	109 974	7	14	28	152
21 133	23 013	(S)	482	621	(S)	460	86 522	13 296	9	12	32	1521
130 847	112 976	3 269	607	* 1 796	* 13 511	(D)	(D)	48 985	17	20	59	1531
55 306	49 962	12 403	2 415	1 469	14 189	1 248	163 750	48 113	7	5	19	154
301 212	645 436	93 802	17 383	10 883	82 911	5 236	861 120	244 720	4	3	20	1541
												1542
												16
203 048	110 807	112 293	11 919	34 545	269 217	4 497	603 805	284 318	3	3	6	1611
43 811	24 914	19 259	1 793	2 684	38 955	1 040	103 921	46 431	4	6	5	162
70 804	30 165	48 088	9 569	13 723	93 112	1 904	156 902	82 979	4	3	7	1622
74 194	32 507	37 498	6 867	12 030	112 069	2 052	156 988	90 111	4	3	16	1623
												1629
												17
250 417	52 318	255 009	7 536	7 591	65 034	5 811	402 292	230 056	3	4	10	1711
(D)	3 084	38 239	1 350	651	10 926	1 259	52 826	38 052	8	7	21	1721
124 534	13 468	156 793	3 272	3 285	38 611	4 527	309 805	189 133	3	3	13	1731
(D)	(D)	39 432	557	864	6 542	1 255	57 336	39 077	7	(D)	36	174
37 532	7 531	86 263	711	1 551	8 555	1 759	109 759	63 993	5	5	17	1741
5 231	90	3 933	* 25	64	620	86	6 656	(D)	27	23	5	1742
												1743
31 697	7 720	40 798	957	1 614	9 493	1 430	64 190	37 731	8	10	15	175
18 653	2 135	26 761	383	418	2 143	301	27 174	11 141	8	5	7	1751
82 090	11 652	42 850	2 779	3 912	26 892	2 396	141 281	79 963	7	6	19	1761
77 460	8 814	99 950	5 712	5 602	49 148	2 386	174 651	101 367	7	7	19	1771
5 519	404	* 442	146	(S)	6 429	121	9 573	5 170	20	15	(S)	1781
												179
11 276	(D)	28 065	916	* 755	5 089	500	31 665	24 090	6	(D)	46	1791
11 030	144	15 061	308	* 175	2 089	463	29 613	17 435	7	7	59	1793
9 237	3 951	20 281	693	2 276	27 088	987	76 807	53 004	15	13	34	1794
788	221	836	54	(D)	2 024	(D)	(D)	(D)	8	5	(D)	1795
17 930	(D)	4 096	1 180	1 378	7 585	1 183	68 578	45 326	5	(D)	26	1796
25 819	6 286	24 041	1 347	1 511	7 589	1 270	51 521	32 822	9	9	22	1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	5 940	5 607	5 453	6 307	1	1	3	3
Proprietors and working partners	3 084	1 999	2 432	4 269	2	5	4	5
All employees**	47 936	46 042	42 414	52 582	1	1	1	1
Construction workers:								
March	34 107	32 701	31 704	42 044	1	1	2	1
May	37 903	37 539	35 206	47 241	1	1	2	2
August	42 057	40 579	37 019	49 075	1	1	2	2
November	36 680	36 502	33 847	42 913	1	1	2	1
Average	37 687	36 830	35 015	45 352	1	1	2	1
Other employees:								
March	10 197	9 047	7 349	6 794	2	2	2	2
May	10 164	9 066	(NA)	(NA)	2	2	(NA)	(NA)
August	10 440	9 379	(NA)	(NA)	2	2	(NA)	(NA)
November	10 197	9 357	(NA)	(NA)	1	2	(NA)	(NA)
Average	10 249	9 212	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	1 083 919	951 720	695 505	627 580	1	1	1	1
Payroll, construction workers	777 922	701 313	536 063	509 515	1	1	1	1
Payroll, other employees	305 997	250 406	159 442	118 065	1	1	1	1
First-quarter payroll, all employees	236 558	203 837	150 140	133 945	1	1	1	1
Fringe benefits, all employees	251 284	196 804	119 961	103 362	1	1	1	1
Legally required expenditures	172 530	132 870	92 139	64 015	1	1	1	1
Voluntary expenditures	78 754	63 933	27 822	39 347	2	1	2	1
Dollar value of business done	5 380 522	4 475 208	2 952 829	2 437 942	2	2	1	1
Value of construction work	5 255 201	4 291 125	2 870 903	2 349 977	2	1	1	1
Value of construction work subcontracted in from others	1 226 873	957 331	607 457	483 395	2	3	2	2
Other business receipts	125 322	139 376	66 785	87 965	3	3	4	2
Net value of construction†	3 943 754	3 230 058	2 267 709	1 893 902	2	1	1	1
Value added††	2 231 420	1 958 207	1 315 858	1 091 896	1	1	1	1
Selected costs	3 149 102	2 472 294	1 621 830	1 326 936	2	2	1	1
Materials, components, and supplies	1 735 958	1 329 440	947 260	823 817	3	2	1	1
Construction work subcontracted out to others	1 311 447	1 061 067	603 194	456 075	3	3	2	2
Selected power, fuels, and lubricants	101 697	81 787	71 375	47 045	1	1	2	1
Electricity	12 281	9 691	7 429	4 962	3	4	3	2
Natural gas	6 975	6 427	4 958	3 723	3	3	5	6
Gasoline and diesel fuel	74 138	59 259	54 374	33 328	1	2	3	2
On highway use	46 815	37 950	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use	27 322	21 308	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases	8 304	6 408	4 612	5 040	3	3	4	3
Rental cost for machinery, equipment, and buildings	81 892	69 519	35 320	24 896	3	3	3	2
For machinery and equipment	60 719	51 715	26 163	19 568	4	4	3	2
For buildings	21 173	17 804	9 156	5 328	4	5	5	3
Selected purchased services	113 668	86 368	56 283	53 871	3	3	2	2
Communication services	23 290	17 212	12 210	9 262	5	4	2	4
Repairs to buildings and other structures	5 746	3 419	2 417	1 821	11	6	7	8
Repairs to machinery and equipment	84 632	65 737	41 654	42 787	3	3	2	2
Ownership of construction projects:								
Value of construction work	5 255 201	4 291 125	2 870 903	2 349 977	2	1	1	1
Government owned	1 509 534	1 123 307	790 300	570 405	2	2	3	1
Federal	337 395	335 107	(NA)	(NA)	4	3	(NA)	(NA)
State and local	1 172 139	788 200	(NA)	(NA)	2	3	(NA)	(NA)
Privately owned	3 745 666	3 167 817	2 080 603	1 779 572	4	3	2	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	878 778	792 045	2	3
Capital expenditures, other than land -----	114 434	88 764	4	3
New -----	73 178	62 900	5	4
Used -----	41 256	25 863	6	6
Retirements and disposition of depreciable assets -----	51 992	35 211	13	6
End-of-year gross book value of depreciable assets -----	941 220	845 598	2	3
Depreciation charges during year-----	92 502	90 396	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	110 987	161 421	4	10
Capital expenditures, other than land -----	11 913	13 032	15	13
New buildings and other structures -----	8 997	9 212	18	17
Used buildings and other structures -----	2 915	3 820	20	17
Retirements and disposition of depreciable assets -----	5 776	4 809	11	23
End-of-year gross book value of depreciable assets -----	117 123	169 645	4	11
Depreciation charges during year-----	8 685	13 319	8	10
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	767 791	630 623	2	2
Capital expenditures, other than land -----	102 522	75 731	4	3
New machinery and equipment, including automobiles and trucks -----	64 181	53 688	4	3
New automobiles and trucks, intended primarily for highway use -----	21 106	22 622	6	5
Used machinery and equipment, including automobiles and trucks -----	38 341	22 043	7	6
Retirements and disposition of depreciable assets -----	46 216	30 401	15	6
End-of-year gross book value of depreciable assets -----	824 097	675 953	2	2
Depreciation charges during year-----	83 817	77 077	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	5 940	1
Value of construction work	5 255 201	2
Establishments with inventories:		
Number	1 818	3
Value of construction work	2 212 431	1
Inventories ¹ :		
End of 1992, materials and supplies	67 428	6
End of 1991, materials and supplies	58 825	5
Establishments with no inventories:		
Number	2 138	3
Value of construction work	1 977 872	4
Establishments not reporting:		
Number	1 984	3
Value of construction work	1 064 898	4

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	5 940	3 499	1 345	628	331	89	37	11	—	—
All employees** -----	47 936	6 504	8 358	8 334	9 757	6 133	5 218	3 634	—	—
Payroll, all employees -----	1 083 919	98 149	149 952	173 711	254 127	174 726	144 542	88 712	—	—
Dollar value of business done -----	5 380 522	766 929	735 609	769 065	1 243 638	820 175	684 074	361 033	—	—
Value of construction work -----	5 255 201	755 185	719 870	759 074	1 221 907	797 543	661 232	340 390	—	—
Net value of construction work† -----	3 943 754	575 740	574 063	600 312	918 445	573 961	425 062	276 171	—	—
Value added†† -----	2 231 420	299 046	316 486	341 866	507 151	319 759	276 275	170 837	—	—
Cost of materials, components, supplies, and fuels -----	1 837 656	288 438	273 316	268 436	433 025	276 834	171 629	125 977	—	—
Cost of construction work subcontracted out to others -----	1 311 447	179 445	145 807	158 762	303 462	223 582	236 170	64 219	—	—
Rental cost for machinery, equipment, and buildings -----	81 892	7 603	10 086	10 273	19 351	13 125	11 641	9 812	—	—
Capital expenditures, other than land -----	114 434	12 982	13 419	15 584	21 846	19 298	19 334	11 972	—	—
End-of-year gross book value of depreciable assets -----	941 220	79 775	120 116	138 169	187 505	195 823	155 525	64 307	—	—
1987										
All employees** -----	46 042	6 239	8 160	8 050	10 541	6 536	5 081	1 433	(D)	—
Value of construction work -----	4 291 125	557 417	545 607	620 466	1 032 508	702 263	577 786	255 076	(D)	—
Value added†† -----	1 958 207	229 854	252 239	307 050	467 558	328 004	256 479	117 021	(D)	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	5	6	6	3	(Z)	(Z)	(Z)	—	—
Net value of construction work† -----	2	8	7	9	2	(Z)	(Z)	(Z)	—	—
Capital expenditures, other than land -----	4	16	20	16	2	(Z)	(Z)	(Z)	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	5 940	(S)	(S)	867	1 558	1 028	693	475	262	113	81
All employees** -----	47 936	(S)	(S)	1 481	4 916	5 775	6 114	7 129	6 350	5 470	9 939
Payroll, all employees -----	1 083 919	(S)	(S)	15 637	67 283	99 099	116 088	170 729	169 820	157 552	281 656
Dollar value of business done -----	5 380 522	(S)	(S)	62 946	245 814	365 682	476 580	733 667	873 589	797 608	1 804 472
Value of construction work -----	5 255 201	(S)	(S)	61 380	241 603	358 124	467 264	717 900	854 209	782 714	1 751 948
Net value of construction work† -----	3 943 754	(S)	(S)	57 949	224 462	322 967	405 218	581 597	627 842	576 235	1 128 582
Value added†† -----	2 231 420	(S)	(S)	36 861	137 655	190 835	233 514	331 883	363 833	290 650	634 230
Cost of materials, components, supplies, and fuels -----	1 837 656	(S)	(S)	22 654	91 017	139 690	181 020	265 480	283 390	300 480	546 875
Cost of construction work subcontracted out to others -----	1 311 447	(S)	(S)	3 431	17 141	35 157	62 046	136 303	226 367	206 479	623 366
Rental cost for machinery, equipment, and buildings -----	81 892	(S)	(S)	(S)	4 467	8 165	6 407	10 253	9 145	9 470	33 196
Capital expenditures, other than land -----	114 434	(S)	(S)	1 170	8 337	10 635	9 291	12 779	15 186	20 193	36 278
End-of-year gross book value of depreciable assets -----	941 220	(S)	(S)	(S)	47 054	87 369	70 548	108 746	156 437	158 965	298 040
1987											
All employees** -----	46 042	(S)	(S)	(S)	5 463	5 824	5 172	7 885	5 920	6 073	6 633
Value of construction work -----	4 291 125	(S)	(S)	(S)	240 151	310 621	367 134	765 366	604 216	695 075	1 221 821
Value added†† -----	1 958 207	(S)	(S)	(S)	137 357	176 635	191 793	332 702	302 335	309 163	458 506
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	10	7	7	7	5	3	3	(Z)
Net value of construction work† -----	2	(S)	(S)	8	6	7	7	6	6	9	1
Capital expenditures, other than land -----	4	(S)	(S)	27	17	20	23	15	9	5	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	5 255 201	3 244 695	1 146 993	718 647	2	3	2	2
Building construction	3 786 562	2 511 028	838 883	436 651	3	4	3	3
Single-family houses	1 341 785	979 101	208 559	154 124	7	9	7	7
Single-family houses, detached	1 228 740	898 197	193 340	137 203	7	10	7	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	113 045	80 905	15 219	16 921	8	10	12	15
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	87 070	46 705	24 378	15 986	9	16	6	14
Other residential buildings, including hotels, motels, and tourist cabins	36 414	12 437	19 752	4 225	4	7	5	10
Office buildings	492 781	350 777	100 494	41 510	2	2	7	12
Other commercial buildings such as stores, restaurants, and automobile service stations	556 148	358 700	138 679	58 769	5	5	10	8
Industrial buildings and warehouses	539 964	292 307	153 929	93 728	2	3	3	5
Industrial buildings	430 637	225 467	130 931	74 239	2	3	3	5
Warehouses	109 327	66 840	22 998	19 489	4	5	6	11
Religious buildings	55 141	29 671	16 149	9 321	5	7	9	7
Educational buildings	318 044	214 105	78 600	25 339	3	5	6	7
Hospitals and institutional buildings	215 696	134 501	60 913	20 283	3	4	5	5
Farm buildings, nonresidential	36 476	24 546	4 993	6 937	14	12	23	31
Amusement, social, and recreational buildings, indoors	42 595	25 901	15 082	1 612	12	13	25	24
Other nonresidential buildings	64 449	42 276	17 356	(S)	12	11	32	(S)
Nonbuilding construction	1 323 774	733 668	308 110	281 996	1	2	3	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	566 056	263 346	157 947	144 763	2	3	3	2
Private driveways and parking areas	30 299	19 246	6 789	4 264	19	17	39	28
Bridges, tunnels, and elevated highways	123 902	69 187	40 639	14 076	3	4	2	3
Conservation and development construction	62 551	41 441	13 929	7 181	9	10	30	7
Power and communication transmission lines, towers, and related facilities	75 545	41 954	18 558	15 033	9	14	3	16
Sewers, water mains, and related facilities	157 186	133 355	13 216	10 615	4	5	12	10
Sewers, sewer lines, septic systems, and related facilities	95 826	84 414	6 164	5 247	4	4	23	17
Water mains and related facilities	61 360	48 940	7 052	5 368	8	8	10	8
Pipeline construction other than sewer or water lines	96 260	48 056	23 056	25 148	3	5	3	2
Blast furnaces, petroleum refineries, chemical complexes, etc.	55 263	13 975	10 210	31 078	4	7	6	2
Sewage treatment and water treatment plants	64 727	49 854	13 821	1 051	6	7	2	37
Sewage treatment plants	31 997	21 249	(D)	(D)	4	5	(D)	(D)
Water treatment plants	32 730	28 605	(D)	(D)	10	12	(D)	(D)
Other nonbuilding construction	91 984	53 253	9 944	28 787	6	6	13	13
Construction work, n.s.k.	144 865	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
1987								
Value of construction work	4 291 125	2 809 926	813 765	513 758	1	2	2	2
Building construction	2 890 285	1 958 582	583 165	334 674	2	3	3	4
Single-family houses	890 121	639 785	126 739	123 596	6	8	7	7
Single-family houses, detached	794 751	565 722	115 802	113 226	6	9	8	8
Single-family houses, attached, including townhouses and townhouse-type condominiums	95 369	74 062	10 936	10 369	13	16	18	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	125 555	98 898	18 114	8 542	4	4	8	12
Other residential buildings, including hotels, motels, and tourist cabins	60 535	41 238	11 123	8 173	5	6	12	10
Office buildings	395 857	278 008	90 882	26 965	3	4	4	3
Other commercial buildings such as stores, restaurants, and automobile service stations	420 715	286 021	97 060	37 632	2	3	4	6
Industrial buildings and warehouses	442 130	280 492	94 301	67 336	5	8	4	4
Industrial buildings	328 465	195 069	78 394	55 001	4	5	4	4
Warehouses	113 665	85 423	15 906	12 335	18	23	4	10
Religious buildings	128 851	101 443	19 327	8 080	2	2	4	10
Educational buildings	160 635	86 083	52 910	21 640	4	6	6	11
Hospitals and institutional buildings	167 335	91 699	57 865	17 770	4	4	9	11
Farm buildings, nonresidential	38 577	26 837	2 576	9 163	23	30	20	16
Amusement, social, and recreational buildings, indoors	19 455	11 159	3 933	4 362	10	7	14	38
Other nonresidential buildings	40 519	25 657	8 470	6 406	14	17	24	23
Nonbuilding construction	1 247 165	842 605	230 465	174 093	1	1	3	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	521 115	330 310	108 517	82 287	2	1	3	4
Private driveways and parking areas	41 241	28 669	8 531	4 040	7	8	7	17
Bridges, tunnels, and elevated highways	145 045	113 960	22 987	8 097	3	3	3	14
Power and communication transmission lines, towers, and related facilities	78 308	42 400	27 816	8 091	5	9	2	10
Sewers, water mains, and related facilities	141 806	107 812	15 081	18 913	6	7	9	12
Sewers, sewer lines, septic systems, and related facilities	86 224	62 163	12 284	11 777	6	4	10	18
Water mains and related facilities	55 581	45 648	2 797	7 136	12	14	18	9
Pipeline construction other than sewer or water lines	30 532	23 400	2 655	4 476	9	8	19	18
Blast furnaces, petroleum refineries, chemical complexes, etc.	17 330	3 854	5 715	7 760	13	15	7	22
Sewage treatment and water treatment plants	49 983	28 569	19 212	2 201	10	1	27	1
Sewage treatment plants	27 402	18 819	7 711	871	1	1	2	(Z)
Water treatment plants	22 580	9 750	*11 500	1 329	23	1	45	1
Other nonbuilding construction	221 804	107 059	13 192	16 310	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	153 676	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	5 940	37 687	34 107	37 903	42 057	36 680	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	909	2 767	2 682	2 790	3 017	2 579	5	8	8	8	8	8
1522	Other residential buildings -----	53	481	428	534	533	428	29	9	10	9	7	9
1531	Operative builders -----	138	350	349	368	368	317	17	22	22	20	20	23
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	88	824	650	746	1 011	889	17	7	9	7	6	7
1542	Nonresidential buildings, n.e.c. ---	361	3 747	3 503	3 842	3 995	3 650	9	4	4	4	4	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	135	3 484	2 510	3 321	5 032	3 072	13	3	3	4	3	2
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	18	805	700	879	879	765	13	3	3	4	2	3
1623	Water, sewer, and utility lines -----	202	2 547	2 486	2 604	2 579	2 521	11	5	5	6	5	4
1629	Heavy construction, n.e.c. -----	279	2 023	1 797	2 059	2 170	2 066	9	4	5	4	4	4
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	885	4 621	4 411	4 666	4 805	4 600	4	3	3	3	3	3
1721	Painting and paper hanging -----	312	1 171	1 117	1 194	1 286	1 089	6	8	9	9	8	9
1731	Electrical work -----	445	2 896	2 799	2 806	3 057	2 924	4	3	3	4	4	4
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	192	1 059	1 066	1 101	1 101	967	6	7	7	7	9	10
1742	Plastering, drywall, and insulation work -----	164	1 398	1 376	1 408	1 475	1 333	11	6	5	6	6	5
1743	Terrazzo, tile, marble, and mosaic work -----	28	157	153	158	168	151	29	30	30	30	28	31
175	Carpentry and floor work:												
1751	Carpentry -----	365	1 101	1 030	1 060	1 253	1 060	5	9	9	9	9	9
1752	Floor laying and other floor work --	124	409	411	420	434	371	9	9	9	11	10	9
1761	Roofing, siding, and sheet metal work -----	376	2 444	1 870	2 266	3 090	2 549	6	8	7	8	10	9
1771	Concrete work -----	343	2 269	1 835	2 483	2 595	2 163	6	7	7	7	7	7
1781	Water well drilling -----	38	130	119	155	128	120	18	19	20	18	18	19
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	22	456	459	495	379	490	12	6	3	5	8	9
1793	Glass and glazing work -----	35	166	168	164	163	169	6	9	9	12	8	10
1794	Excavation work -----	81	358	310	375	366	381	15	17	16	15	14	22
1795	Wrecking and demolition work -----	13	48	46	47	54	44	34	9	10	10	8	10
1796	Installing building equipment, n.e.c. -----	64	916	882	912	924	946	17	4	5	4	4	4
1799	Special trade contractors, n.e.c. ---	270	1 060	952	1 050	1 196	1 040	11	9	9	9	7	10

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.1	22.6	139.4	.206	.350	.250	.233	.016
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.1	17.3	178.0	.131	.393	.313	.035	.006
1522	Other residential buildings -----	10.5	23.2	134.4	.201	.327	.356	(S)	.007
1531	Operative builders -----	4.8	21.6	918.2	.044	.407	.352	.010	.002
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	12.3	24.9	180.5	.181	.372	.336	.083	.016
1542	Nonresidential buildings, n.e.c. -----	14.3	24.3	335.2	.099	.240	.514	.075	.014
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	31.4	24.1	139.6	.210	.417	.228	.231	.025
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	51.8	25.7	131.9	.223	.413	.235	.181	.017
1623	Water, sewer, and utility lines -----	15.2	25.8	105.2	.296	.264	.113	.180	.036
1629	Heavy construction, n.e.c. -----	8.9	23.0	112.4	.252	.326	.143	.165	.030
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	7.3	24.7	128.9	.268	.420	.088	.428	.013
1721	Painting and paper hanging -----	4.3	17.8	54.1	.374	(D)	.049	.603	.021
1731	Electrical work -----	8.3	25.2	99.0	.325	.434	.047	.547	.011
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6.0	18.7	53.3	.382	(D)	(D)	.699	.010
1742	Plastering, drywall, and insulation work -----	10.0	23.2	71.8	.380	.374	.075	.859	.007
1743	Terrazzo, tile, marble, and mosaic work -----	6.5	23.2	81.8	.323	.407	.007	.306	*.002
175	Carpentry and floor work:								
1751	Carpentry -----	3.6	15.7	74.3	.250	.388	.094	.499	.012
1752	Floor laying and other floor work -----	4.1	21.9	101.9	.266	.448	.051	.642	.009
1761	Roofing, siding, and sheet metal work -----	8.2	19.0	85.1	.282	.395	.056	.206	.013
1771	Concrete work -----	8.0	18.7	76.5	.295	.446	.051	.576	.033
1781	Water well drilling -----	4.6	26.5	111.0	.316	.382	.028	.031	.010
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	23.8	24.4	72.9	.391	.339	(D)	.844	.028
1793	Glass and glazing work -----	7.5	23.1	118.9	.312	.559	.007	.763	.016
1794	Excavation work -----	5.4	24.8	101.2	.297	.255	.109	.560	.019
1795	Wrecking and demolition work -----	4.2	14.1	73.9	.219	.222	.062	.236	.015
1796	Installing building equipment, n.e.c. -----	17.6	28.2	87.2	.400	.224	(D)	.051	.015
1799	Special trade contractors, n.e.c. -----	5.0	21.5	72.5	.374	.336	.082	.313	.018

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	KANSAS CITY, MO-KS MSA											
15,16, 17	Construction industries	4 037	37 512	941 580	4 126 782	3 085 130	1 805 277	1 364 250	1 041 652	79 702	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	590	2 551	46 101	332 376	217 338	111 888	126 959	115 039	3 197	12	21
1522	Other residential buildings	(S)	568	12 873	56 072	38 430	20 046	18 445	17 643	(D)	15	12
1531	Operative builders	131	392	8 673	193 797	127 409	44 664	86 052	66 388	1 310	22	19
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	731	21 688	144 066	90 960	55 181	36 811	53 106	902	9	7
1542	Nonresidential buildings, n.e.c.	252	3 129	85 789	751 948	282 190	147 217	148 004	469 758	4 302	4	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	69	2 196	65 260	276 991	209 663	124 216	103 186	67 329	18 728	5	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	14	672	20 182	116 127	93 920	54 520	42 917	22 207	3 104	7	26
1623	Water, sewer, and utility lines	99	2 477	77 243	268 061	232 664	149 464	83 857	35 396	13 566	5	2
1629	Heavy construction, n.e.c.	91	988	22 275	111 239	96 129	58 782	37 859	(S)	(S)	7	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	510	5 231	155 548	598 072	515 266	289 031	229 680	82 807	7 190	3	4
1721	Painting and paper hanging	299	1 484	30 176	72 217	69 428	50 481	19 044	2 789	(S)	7	6
1731	Electrical work	290	3 033	86 252	263 555	249 272	151 491	99 765	14 283	3 257	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	161	2 288	35 753	91 475	89 171	63 665	25 544	2 304	694	4	5
1742	Plastering, drywall, and insulation work	145	1 337	31 302	81 909	71 238	47 613	27 342	10 671	773	7	6
1743	Terrazzo, tile, marble, and mosaic work	22	182	5 501	(D)	14 540	8 455	6 382	(D)	147	10	8
175	Carpentry and floor work:											
1751	Carpentry	324	1 457	27 861	(S)	(S)	53 914	(S)	(S)	1 675	9	(S)
1752	Floor laying and other floor work	105	493	11 598	38 034	34 310	20 000	15 287	(S)	175	13	12
1761	Roofing, siding, and sheet metal work	(S)	2 299	52 592	168 964	161 388	104 669	58 931	7 575	2 983	7	3
1771	Concrete work	316	2 638	51 550	174 396	166 206	89 534	78 101	8 190	5 326	6	6
1781	Water well drilling	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	22	566	15 341	41 338	38 687	26 200	13 133	2 651	221	7	5
1793	Glass and glazing work	26	(D)	(D)	17 085	16 875	(D)	9 683	210	167	(D)	19
1794	Excavation work	71	548	14 725	47 600	40 718	30 508	10 419	6 882	3 308	11	10
1795	Wrecking and demolition work	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	47	545	21 278	58 362	52 362	37 261	15 385	6 000	879	8	8
1799	Special trade contractors, n.e.c.	(S)	1 422	33 993	83 840	74 744	52 842	26 455	9 096	1 068	7	7

KS-14 KANSAS

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Contents

Minnesota

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Minnesota. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 39,089 establishments in this State operating in the construction industries. These establishments accounted for \$13.0 billion in total dollar value of business done.

Most of the 39,089 construction establishments were small. Of the total, 28,425 were nonemployers, and over half of the employer establishments had less than 5 employees. The 3,852 construction establishments with 5 employees or more, while representing only 10 percent of all establishments, accounted for more than 82 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$12.0 billion in total dollar value of business done. Of this amount, \$11.7 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$3.5 billion, leaving net value of construction work of \$8.2 billion. In addition, these establishments paid out \$3.8 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$5.1 billion. (See Introduction and appendixes for explanation of terms.)

There were 10,664 establishments with total employment averaging 85,977 during the year. Total payroll for 1992 was \$2.5 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 28,425 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$919 million. Most of these establishments, about 84 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992
1987

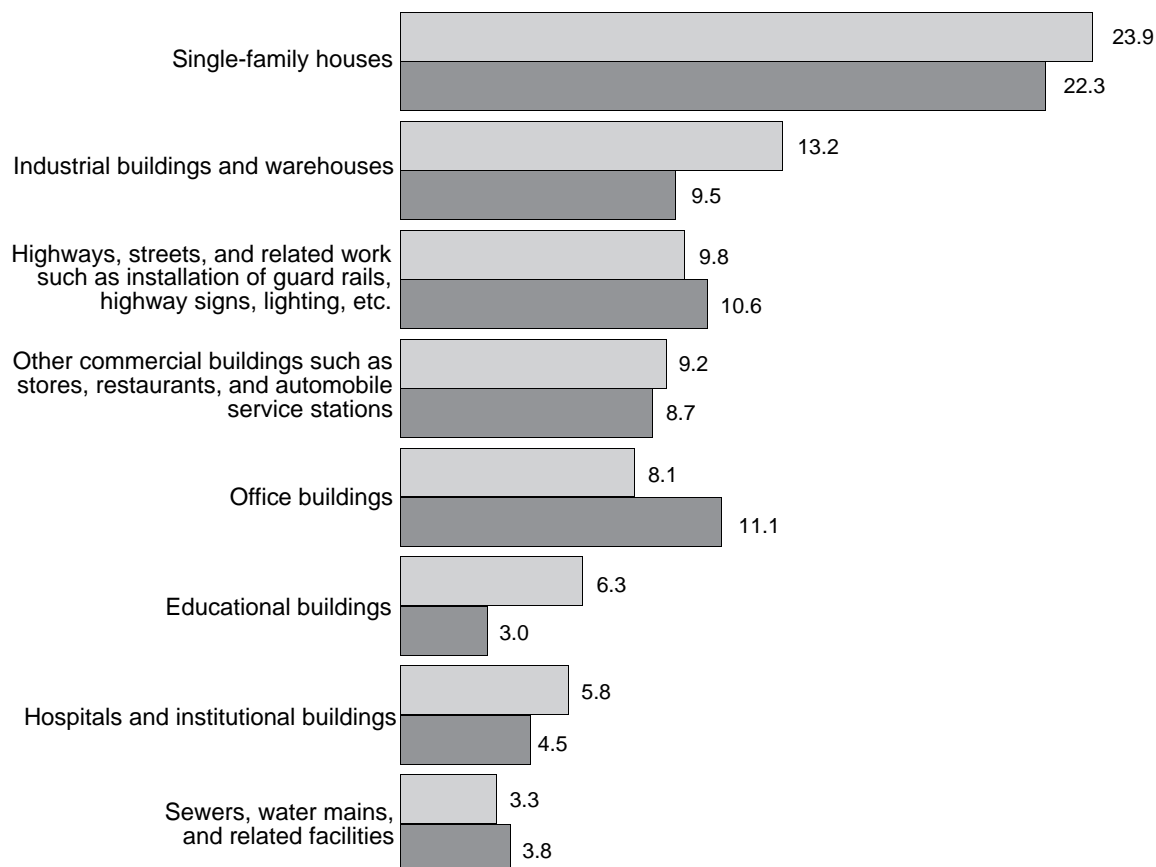


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992
1987

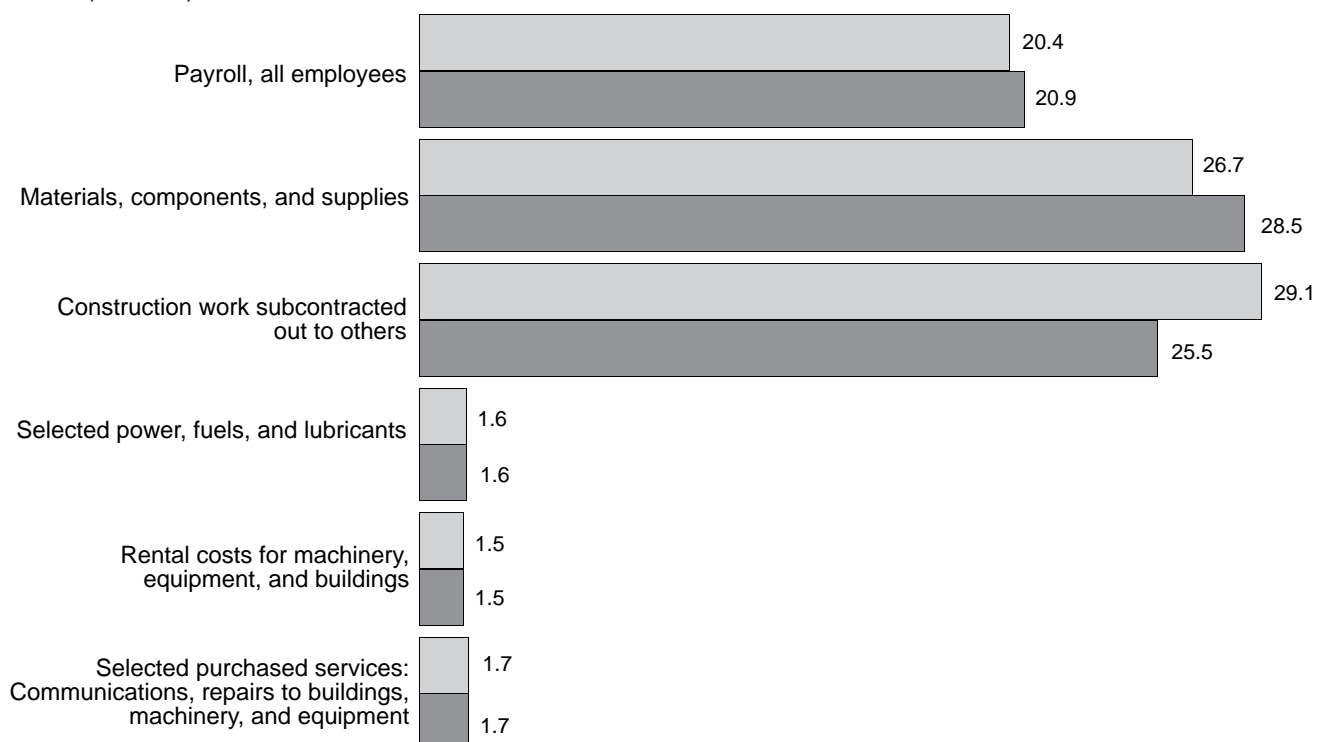


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	39 089	32 405	85 977	12 954 623	28 425	28 106	918 975	10 664	4 299	85 977	12 035 648	1	1
15	Building construction—General contractors and operative builders ----	7 111	5 002	20 479	5 495 343	4 140	3 846	305 468	2 971	1 156	20 479	5 189 875	5	2
16	Heavy construction other than building construction—contractors -----	1 253	742	13 179	2 121 506	502	478	23 601	751	264	13 179	2 097 905	2	1
17	Special trade contractors -----	30 725	26 662	52 319	5 337 774	23 783	23 782	589 906	6 942	2 880	52 319	4 747 868	1	1
1711	Plumbing, heating, and air-conditioning --	2 682	1 802	11 727	1 320 495	1 377	1 361	55 491	1 305	441	11 727	1 265 004	2	2
1731	Electrical work -----	2 134	1 346	9 776	884 098	926	900	29 587	1 208	446	9 776	854 511	2	2
	1987													
15, 16, 17	Construction industries² -----	40 021	32 601	83 814	11 422 980	30 337	29 865	1 404 793	9 684	2 736	83 814	10 018 187	1	1
15	Building construction—General contractors and operative builders ----	8 817	6 252	19 202	4 324 090	6 124	5 643	510 486	2 693	609	19 202	3 813 604	2	2
16	Heavy construction other than building construction—contractors -----	1 313	748	15 160	2 155 359	518	493	36 142	795	255	15 160	2 119 217	1	1
17	Special trade contractors -----	29 183	24 950	49 115	4 722 128	23 079	23 087	700 965	6 104	1 863	49 115	4 021 163	1	1
1711	Plumbing, heating, and air-conditioning --	2 653	1 777	11 260	1 140 210	1 461	1 457	75 455	1 192	320	11 260	1 064 755	2	1
1731	Electrical work -----	2 074	1 416	8 581	747 245	1 129	1 120	49 339	945	296	8 581	697 906	2	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	10 664	85 977	66 389	2 453 914	1 770 908	11 747 155	8 249 248	5 133 010
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	1 905	6 713	4 947	123 555	85 258	874 807	577 652	286 268
1522	Other residential buildings -----	64	429	283	11 161	5 629	111 698	42 298	22 925
1531	Operative builders -----	332	1 731	812	56 261	17 142	880 172	515 277	276 421
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	112	4 213	3 338	118 216	76 329	1 147 769	(D)	344 932
1542	Nonresidential buildings, n.e.c. -----	560	7 394	5 238	237 926	153 098	2 075 227	811 122	535 635
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	274	6 480	5 418	235 421	182 840	1 114 373	876 457	550 922
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	11	857	722	28 407	21 345	142 610	(D)	(D)
1623	Water, sewer, and utility lines -----	204	2 963	2 447	90 605	67 483	389 497	326 100	202 809
1629	Heavy construction, n.e.c. -----	262	2 879	2 307	93 753	67 389	378 340	309 188	219 254
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	1 305	11 727	8 619	377 246	277 359	1 249 940	1 087 734	652 901
1721	Painting and paper hanging -----	466	2 321	1 881	58 109	45 144	157 873	147 156	106 474
1731	Electrical work -----	1 208	9 776	7 650	309 345	235 534	829 235	802 143	501 336
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	513	3 264	2 830	73 544	61 237	228 128	213 217	127 280
1742	Plastering, drywall, and insulation work -----	350	3 588	2 969	101 244	78 846	280 088	249 851	160 189
1743	Terrazzo, tile, marble, and mosaic work -----	110	706	515	18 854	12 379	58 538	56 149	33 516
175	Carpentry and floor work:								
1751	Carpentry -----	751	3 551	2 851	67 722	51 642	256 508	224 344	132 657
1752	Floor laying and other floor work -----	159	847	644	(S)	12 573	74 521	68 575	39 096
1761	Roofing, siding, and sheet metal work -----	447	4 092	3 110	105 725	75 530	392 257	361 972	204 338
1771	Concrete work -----	635	3 775	3 031	88 708	66 116	327 895	303 029	174 224
1781	Water well drilling -----	107	612	491	14 062	11 169	56 056	54 424	30 703
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	54	1 038	870	36 611	30 068	103 387	96 968	75 014
1793	Glass and glazing work -----	70	693	449	18 065	11 479	72 670	64 995	32 779
1794	Excavation work -----	296	1 658	1 309	46 068	35 804	175 409	152 740	113 010
1795	Wrecking and demolition work -----	* 17	132	110	3 531	2 771	14 294	12 315	(D)
1796	Installing building equipment, n.e.c. -----	79	1 591	1 221	50 167	35 657	153 434	146 372	117 924
1799	Special trade contractors, n.e.c. -----	374	2 949	2 327	71 239	51 085	202 430	186 164	140 838

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
3 404 731	3 497 907	3 072 213	177 327	209 415	1 794 389	83 814	9 702 867	4 349 314	1	1	3	15, 16, 17
												15
315 624	297 155	30 117	4 594	9 186	63 976	6 640	692 733	271 143	4	5	18	152
19 462	69 401	870	273	320	4 246	1 022	277 994	69 102	7	5	12	1521
271 497	364 895	4 892	*3 903	4 833	36 108	2 025	711 990	216 724	8	11	38	1531
(D)	(D)	*13 001	12 734	4 314	49 846	1 603	289 067	109 654	26	(D)	26	154
314 919	1 264 105	42 789	10 167	15 269	134 968	7 912	1 681 795	316 380	4	3	5	1541
												1542
												16
389 903	237 916	235 028	38 908	43 402	394 975	7 869	1 224 946	631 481	4	1	4	1611
56 732	(D)	2 743	6 615	2 235	34 107	1 413	154 728	77 980	(Z)	(D)	8	162
128 406	63 396	88 660	9 318	17 947	166 631	3 427	447 500	223 667	4	3	12	1622
92 995	69 152	37 059	19 138	18 453	171 359	2 451	249 555	113 022	5	4	13	1623
												1629
												17
449 897	162 206	641 069	13 505	15 429	154 908	11 260	1 047 690	543 693	2	2	9	1711
41 294	10 718	90 263	3 205	5 040	28 972	2 692	143 589	102 721	6	5	22	1721
326 084	27 092	422 625	10 657	12 026	86 911	8 581	687 612	416 607	2	2	9	1731
86 097	14 911	193 705	2 099	4 096	32 670	2 793	183 320	108 529	6	5	18	174
91 897	30 236	245 446	3 629	2 405	23 469	3 070	268 563	149 313	4	4	20	1741
26 346	*2 389	44 771	*353	*658	4 722	641	51 529	36 086	9	10	47	1742
												1743
93 711	32 164	142 078	3 589	2 485	19 077	3 637	198 200	107 419	6	7	22	175
29 963	(S)	(S)	621	1 135	(S)	908	69 881	43 781	11	9	39	1751
171 644	30 285	203 280	6 332	8 772	66 709	3 456	270 921	143 778	5	4	23	1752
135 605	24 866	208 936	6 883	12 373	91 723	4 135	339 958	200 254	5	5	12	1761
24 099	1 632	11 815	830	3 805	29 464	555	47 594	26 077	10	9	24	1771
												1781
24 637	6 419	94 692	3 032	2 033	25 291	1 401	126 835	83 232	6	6	22	179
38 781	7 675	58 190	2 071	1 266	11 806	787	68 784	37 772	3	12	12	1791
47 769	22 668	92 209	6 128	11 592	104 660	1 692	184 266	124 822	9	6	15	1793
(D)	1 979	8 121	*1 339	962	8 106	*117	*6 195	*4 269	11	6	34	1794
37 873	7 062	46 661	2 386	2 202	15 856	974	88 276	59 149	3	3	23	1795
(D)	16 266	80 310	5 019	7 178	27 779	2 416	146 875	102 366	6	7	14	1796
												1799

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	10 664	9 684	9 260	9 711	1	1	2	2
Proprietors and working partners	4 299	2 736	3 268	5 453	2	4	3	4
All employees**	85 977	83 814	73 461	83 149	1	1	1	1
Construction workers:								
March	53 385	52 977	45 635	50 598	2	1	1	1
May	68 726	69 100	57 649	72 434	2	1	1	1
August	77 450	76 182	66 675	81 332	2	1	1	1
November	65 995	66 690	58 425	73 584	2	1	1	1
Average	66 389	66 237	58 060	69 540	2	1	1	1
Other employees:								
March	19 329	16 800	15 277	12 799	1	1	1	1
May	19 482	17 464	(NA)	(NA)	1	1	(NA)	(NA)
August	19 945	18 239	(NA)	(NA)	1	1	(NA)	(NA)
November	19 600	17 819	(NA)	(NA)	1	1	(NA)	(NA)
Average	19 589	17 581	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	2 453 914	2 093 881	1 490 342	1 154 289	1	1	1	1
Payroll, construction workers	1 770 908	1 543 598	1 139 218	932 707	1	1	1	1
Payroll, other employees	683 006	550 282	351 123	221 582	1	1	1	1
First-quarter payroll, all employees	487 390	417 445	299 432	208 758	1	1	1	1
Fringe benefits, all employees	729 038	541 009	260 798	216 502	1	1	1	1
Legally required expenditures	455 578	365 415	201 741	133 641	1	1	1	1
Voluntary expenditures	273 460	175 593	59 056	82 861	1	1	1	1
Dollar value of business done	12 035 648	10 018 187	6 009 326	4 715 529	1	1	1	1
Value of construction work	11 747 155	9 702 867	5 826 218	4 561 549	1	1	1	1
Value of construction work subcontracted in from others	3 072 213	2 147 801	1 210 683	982 948	2	2	1	1
Other business receipts	288 493	218 277	144 671	153 980	4	3	2	4
Net value of construction†	8 249 248	7 143 880	4 377 691	3 593 846	1	1	1	1
Value added††	5 133 010	4 349 314	2 562 920	2 035 222	1	1	1	1
Selected costs	6 902 638	5 571 829	3 407 969	2 627 250	1	1	1	1
Materials, components, and supplies	3 212 395	2 851 639	1 822 309	1 568 612	1	1	1	1
Construction work subcontracted out to others	3 497 907	2 558 986	1 448 526	967 703	1	2	1	1
Selected power, fuels, and lubricants	192 336	161 203	137 132	90 935	1	1	1	1
Electricity	22 182	17 676	12 899	9 631	2	2	2	2
Natural gas	13 521	8 844	8 523	4 897	2	3	3	3
Gasoline and diesel fuel	143 106	122 439	105 148	64 781	1	1	2	1
On highway use	90 967	77 228	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use	52 139	45 210	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases	13 527	12 243	10 561	11 629	2	2	3	7
Rental cost for machinery, equipment, and buildings	177 327	153 966	81 909	52 119	2	2	1	1
For machinery and equipment	122 801	111 152	60 524	42 852	2	2	2	2
For buildings	54 526	42 813	21 385	9 267	4	2	2	2
Selected purchased services	202 627	172 356	124 171	112 954	3	1	1	1
Communication services	45 810	32 176	21 643	15 913	4	2	2	2
Repairs to buildings and other structures	8 177	8 682	5 473	4 188	8	5	3	6
Repairs to machinery and equipment	148 640	131 497	97 054	92 853	3	2	1	1
Ownership of construction projects:								
Value of construction work	11 747 155	9 702 867	5 826 218	4 561 549	1	1	1	1
Government owned	3 565 776	2 525 320	1 673 235	1 248 100	1	1	2	1
Federal	467 779	514 089	(NA)	(NA)	3	2	(NA)	(NA)
State and local	3 097 997	2 011 231	(NA)	(NA)	2	2	(NA)	(NA)
Privately owned	8 181 379	7 177 546	4 152 983	3 313 449	2	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 732 970	1 412 395	2	2
Capital expenditures, other than land -----	209 415	176 948	3	3
New -----	149 925	125 190	3	3
Used -----	59 490	51 758	5	6
Retirements and disposition of depreciable assets -----	147 997	93 704	2	4
End-of-year gross book value of depreciable assets -----	1 794 389	1 495 639	2	2
Depreciation charges during year -----	175 543	157 698	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	303 109	237 761	3	4
Capital expenditures, other than land -----	21 173	25 575	10	7
New buildings and other structures -----	18 011	16 803	8	9
Used buildings and other structures -----	3 162	8 772	28	11
Retirements and disposition of depreciable assets -----	87 821	10 820	1	8
End-of-year gross book value of depreciable assets -----	236 462	252 517	4	4
Depreciation charges during year -----	17 688	20 016	6	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 429 861	1 174 633	2	2
Capital expenditures, other than land -----	188 242	151 372	3	3
New machinery and equipment, including automobiles and trucks -----	131 914	108 386	3	3
New automobiles and trucks, intended primarily for highway use -----	45 702	44 459	5	5
Used machinery and equipment, including automobiles and trucks -----	56 328	42 986	5	7
Retirements and disposition of depreciable assets -----	60 176	82 884	5	5
End-of-year gross book value of depreciable assets -----	1 557 926	1 243 121	2	2
Depreciation charges during year -----	157 855	137 682	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	10 664	1
Value of construction work	11 747 155	1
Establishments with inventories:		
Number	4 349	2
Value of construction work	5 335 772	1
Inventories ¹ :		
End of 1992, materials and supplies	174 023	9
End of 1991, materials and supplies	162 682	7
Establishments with no inventories:		
Number	3 242	3
Value of construction work	4 754 818	1
Establishments not reporting:		
Number	3 074	2
Value of construction work	1 656 565	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								1,000 employees or more	
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	10 664	6 813	1 943	1 083	581	157	69	15	3	1	
All employees** -----	85 977	13 033	12 476	14 275	17 185	10 733	9 759	4 568	3 948	(D)	
Payroll, all employees -----	2 453 914	233 831	264 041	375 554	532 585	355 155	323 989	190 013	178 746	(D)	
Dollar value of business done -----	12 035 648	1 401 470	1 310 124	1 598 406	2 424 603	1 565 432	1 556 215	869 794	1 309 604	(D)	
Value of construction work -----	11 747 155	1 372 114	1 284 833	1 569 765	2 373 261	1 520 104	1 533 371	828 909	1 264 797	(D)	
Net value of construction work† -----	8 249 248	1 083 682	1 012 422	1 250 465	1 696 190	1 111 908	986 514	1 108 068	(D)	(D)	
Value added†† -----	5 133 010	592 911	587 483	744 196	996 560	702 079	647 969	403 568	458 244	(D)	
Cost of materials, components, supplies, and fuels -----	3 404 731	520 127	450 229	534 909	750 972	455 157	361 389	331 948	(D)	(D)	
Cost of construction work subcontracted out to others -----	3 497 907	288 432	272 412	319 300	677 071	408 196	546 857	985 638	(D)	(D)	
Rental cost for machinery, equipment, and buildings -----	177 327	15 565	12 604	22 263	34 318	28 503	26 208	(S)	24 137	(D)	
Capital expenditures, other than land -----	209 415	30 564	30 532	25 303	44 604	29 856	21 740	23 490	3 327	(D)	
End-of-year gross book value of depreciable assets -----	1 794 389	228 500	198 116	220 387	381 975	276 827	249 650	186 935	51 999	(D)	
1987											
All employees** -----	83 814	11 523	13 447	13 403	16 629	8 360	10 286	5 349	4 813	(D)	
Value of construction work -----	9 702 867	1 061 586	1 253 482	1 309 876	1 977 811	2 478 290	(D)	1 621 819	(D)	(D)	
Value added†† -----	4 349 314	480 435	581 196	635 813	933 646	479 899	957 618	(D)	280 705	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	3	5	4	2	3	11	(Z)	(Z)	(D)	
Net value of construction work† -----	1	4	7	4	2	1	3	(Z)	(D)	(D)	
Capital expenditures, other than land -----	3	12	13	9	2	1	2	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	10 664	(S)	(S)	1 391	3 113	1 870	1 204	1 087	401	193	175
All employees** -----	85 977	(S)	(S)	2 018	8 085	8 668	9 416	15 792	11 421	7 678	21 843
Payroll, all employees -----	2 453 914	(S)	(S)	25 760	128 809	170 817	215 384	401 570	320 958	286 320	894 847
Dollar value of business done -----	12 035 648	(S)	(S)	102 100	516 513	657 204	845 638	1 686 297	1 363 693	1 316 259	5 514 431
Value of construction work -----	11 747 155	(S)	(S)	100 622	510 486	652 960	829 362	1 645 361	1 337 295	1 279 710	5 358 439
Net value of construction work† -----	8 249 248	(S)	(S)	93 779	461 534	583 885	716 108	1 339 298	1 034 682	967 391	3 021 616
Value added†† -----	5 133 010	(S)	(S)	57 169	265 742	339 447	416 422	804 470	593 036	577 622	2 060 383
Cost of materials, components, supplies, and fuels -----	3 404 731	(S)	(S)	38 089	201 819	248 682	315 961	575 765	468 045	426 318	1 117 225
Cost of construction work subcontracted out to others -----	3 497 907	(S)	(S)	6 842	48 952	69 075	113 254	306 062	302 612	312 319	2 336 823
Rental cost for machinery, equipment, and buildings -----	177 327	(S)	(S)	1 755	7 278	8 977	10 064	23 823	20 321	16 696	88 146
Capital expenditures, other than land -----	209 415	(S)	(S)	2 905	12 741	23 453	19 791	30 725	21 798	23 723	73 540
End-of-year gross book value of depreciable assets -----	1 794 389	(S)	(S)	19 452	110 504	132 225	158 852	255 034	218 960	209 227	683 623
1987											
All employees** -----	83 814	(S)	(S)	(S)	7 198	8 850	10 163	13 419	10 028	8 209	22 026
Value of construction work -----	9 702 867	(S)	(S)	(S)	409 612	594 555	806 419	1 356 093	1 248 897	1 124 919	4 027 408
Value added†† -----	4 349 314	(S)	(S)	(S)	225 144	324 453	420 263	670 915	573 947	497 658	1 556 799
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	8	5	6	6	4	10	1	(Z)
Net value of construction work† -----	1	(S)	(S)	6	5	6	6	4	4	5	(Z)
Capital expenditures, other than land -----	3	(S)	(S)	23	12	17	14	10	5	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	11 747 155	7 341 030	2 894 805	1 292 643	1	1	1	2
Building construction	8 864 370	5 918 596	2 086 712	859 062	1	2	2	2
Single-family houses	2 813 239	2 157 253	419 432	236 553	3	4	4	6
Single-family houses, detached	2 431 993	1 840 201	382 566	209 226	4	5	4	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	381 246	317 052	36 867	27 327	8	9	14	25
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	306 108	195 452	73 651	37 006	4	5	5	10
Other residential buildings, including hotels, motels, and tourist cabins	308 872	279 076	17 469	12 328	2	2	9	11
Hotels, motels, and tourist cabins	(D)	(D)	12 023	8 969	(D)	(D)	10	9
Other residential buildings	(D)	(D)	5 446	3 359	(D)	(D)	17	35
Office buildings	950 226	514 725	326 687	108 813	3	4	3	2
Other commercial buildings such as stores, restaurants, and automobile service stations	1 075 129	666 254	290 174	118 701	2	2	3	5
Industrial buildings and warehouses	1 545 070	1 024 743	357 931	162 396	2	2	5	4
Industrial buildings	1 292 643	885 790	270 153	136 700	2	1	4	4
Warehouses	252 426	138 953	87 778	25 696	7	6	11	7
Religious buildings	145 238	66 266	61 543	17 429	5	6	7	5
Educational buildings	735 078	426 157	251 642	57 279	3	2	9	5
Hospitals and institutional buildings	676 985	376 467	234 988	65 531	2	1	3	4
Farm buildings, nonresidential	88 003	57 489	12 480	18 034	9	12	16	11
Amusement, social, and recreational buildings, indoors	163 869	123 415	25 762	14 692	2	2	6	2
Other nonresidential buildings	56 555	31 299	14 954	10 301	11	16	4	36
Nonbuilding construction	2 664 107	1 422 434	808 093	433 580	1	1	1	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 155 238	565 878	402 929	186 431	1	2	2	6
Private driveways and parking areas	109 123	64 908	19 097	25 118	5	4	11	11
Bridges, tunnels, and elevated highways	142 337	43 217	60 869	38 251	1	(Z)	1	2
Conservation and development construction	70 648	41 053	8 098	21 497	14	21	39	5
Power and communication transmission lines, towers, and related facilities	97 305	75 833	(D)	(D)	8	10	(D)	(D)
Sewers, water mains, and related facilities	387 867	280 130	73 794	33 943	4	5	3	8
Sewers, sewer lines, septic systems, and related facilities	225 955	170 348	37 442	18 165	4	5	2	8
Water mains and related facilities	161 912	109 782	36 352	15 778	5	6	4	10
Blast furnaces, petroleum refineries, chemical complexes, etc.	178 631	51 147	(D)	(D)	2	6	(D)	(D)
Power plants	161 639	67 246	42 838	(S)	1	(Z)	(Z)	(S)
Sewage treatment and water treatment plants	133 343	85 955	36 324	11 064	3	2	5	6
Other nonbuilding construction	227 977	(S)	48 445	32 466	6	(S)	13	12
Construction work, n.s.k.	218 678	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)
1987								
Value of construction work	9 702 867	6 278 649	2 128 830	917 073	1	1	1	2
Building construction	6 743 814	4 649 105	1 433 346	603 743	1	2	2	2
Single-family houses	2 159 231	1 607 502	373 926	177 802	3	3	5	5
Single-family houses, detached	1 789 303	1 296 137	336 377	156 788	3	4	5	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	369 928	311 365	37 549	21 014	7	7	17	13
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	539 222	430 436	67 938	40 847	7	8	3	7
Other residential buildings, including hotels, motels, and tourist cabins	197 032	143 324	36 106	17 601	4	5	11	9
Hotels, motels, and tourist cabins	146 412	113 241	22 440	10 731	4	5	5	5
Other residential buildings	50 620	30 083	13 666	6 870	12	10	27	19
Office buildings	1 077 058	747 450	242 781	86 826	1	1	2	3
Other commercial buildings such as stores, restaurants, and automobile service stations	842 817	509 578	250 738	82 501	2	2	4	4
Industrial buildings and warehouses	923 273	627 289	181 163	114 821	2	3	3	3
Industrial buildings	671 451	443 684	135 413	92 354	2	2	3	3
Warehouses	251 822	183 605	45 750	22 467	5	6	8	5
Religious buildings	116 853	58 912	47 041	10 900	4	3	6	8
Educational buildings	286 353	180 493	81 704	24 155	2	2	5	7
Hospitals and institutional buildings	437 969	295 015	119 225	23 728	2	2	3	4
Farm buildings, nonresidential	69 333	43 504	14 091	11 737	10	10	26	15
Amusement, social, and recreational buildings, indoors	42 768	25 398	11 668	5 701	6	7	11	5
Other nonresidential buildings	51 905	34 792	8 092	9 029	9	9	26	16
Nonbuilding construction	2 580 739	1 574 955	694 357	311 426	1	1	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 032 781	530 120	331 503	171 157	1	2	2	4
Private driveways and parking areas	86 509	59 857	13 324	13 327	8	10	9	18
Bridges, tunnels, and elevated highways	214 279	168 338	23 709	22 230	4	3	17	1
Conservation and development construction	27 199	22 426	* 2 396	* 2 376	16	15	48	46
Power and communication transmission lines, towers, and related facilities	123 852	67 441	43 721	12 689	7	8	14	11
Sewers, water mains, and related facilities	372 159	313 629	39 562	18 967	3	2	11	12
Sewers, sewer lines, septic systems, and related facilities	230 858	192 528	28 522	9 807	3	2	10	13
Water mains and related facilities	141 301	121 101	11 040	9 160	5	4	14	19
Blast furnaces, petroleum refineries, chemical complexes, etc.	91 804	34 160	38 359	19 284	5	(Z)	(Z)	23
Power plants	112 292	79 686	23 309	9 297	1	(Z)	2	3
Sewage treatment and water treatment plants	150 225	102 196	44 472	3 556	3	4	2	13
Other nonbuilding construction	369 639	197 102	134 002	38 543	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	378 313	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	10 664	66 389	53 385	68 726	77 450	65 995	1	2	2	2	2	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	1 905	4 947	4 263	5 088	5 558	4 880	3	5	5	5	5	5
1522	Other residential buildings -----	64	283	230	327	323	250	22	7	5	9	9	5
1531	Operative builders -----	332	812	716	825	915	790	10	10	10	11	9	9
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	112	3 338	3 035	3 444	3 559	3 314	14	32	36	32	31	31
1542	Nonresidential buildings, n.e.c. ---	560	5 238	4 434	5 233	6 087	5 199	7	4	4	4	5	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	274	5 418	2 109	6 365	7 999	5 200	9	4	5	4	4	4
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	11	722	479	782	930	695	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	204	2 447	1 221	2 788	3 280	2 500	9	4	5	4	4	4
1629	Heavy construction, n.e.c. -----	262	2 307	(D)	(D)	2 938	2 264	11	5	(D)	(D)	5	6
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 305	8 619	7 869	8 346	9 238	9 024	3	2	2	2	2	2
1721	Painting and paper hanging -----	466	1 881	1 451	1 913	2 414	1 748	5	6	6	6	6	8
1731	Electrical work -----	1 208	7 650	7 227	7 609	8 255	7 507	2	2	2	2	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	513	2 830	2 221	2 915	3 291	2 894	6	6	6	7	6	5
1742	Plastering, drywall, and insulation work -----	350	2 969	2 713	2 949	3 224	2 991	7	4	4	5	5	5
1743	Terrazzo, tile, marble, and mosaic work -----	110	515	506	555	564	438	16	9	9	10	10	10
175	Carpentry and floor work:												
1751	Carpentry -----	751	2 851	2 411	2 866	3 216	2 911	4	6	7	6	6	6
1752	Floor laying and other floor work --	159	644	596	628	738	615	11	11	13	11	10	12
1761	Roofing, siding, and sheet metal work -----	447	3 110	2 577	3 155	3 404	3 305	6	5	5	5	5	6
1771	Concrete work -----	635	3 031	1 536	3 576	4 014	2 998	5	5	8	5	5	6
1781	Water well drilling -----	107	491	449	478	537	501	8	12	13	12	13	12
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	54	870	716	874	989	900	20	5	3	5	6	6
1793	Glass and glazing work -----	70	449	449	457	482	410	13	3	4	3	4	4
1794	Excavation work -----	296	1 309	880	1 481	1 596	1 277	9	8	12	8	8	9
1795	Wrecking and demolition work -----	*17	110	(D)	(D)	156	118	44	14	(D)	(D)	24	19
1796	Installing building equipment, n.e.c. -----	79	1 221	1 964	923	1 010	986	15	3	2	4	5	4
1799	Special trade contractors, n.e.c. ---	374	2 327	(D)	(D)	2 734	2 282	9	6	(D)	(D)	7	7

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.1	28.5	176.9	.209	.290	.298	.262	.015
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.5	18.4	176.8	.141	.361	.340	.034	.005
1522	Other residential buildings -----	6.7	26.0	394.7	.100	.174	.621	.008	.002
1531	Operative builders -----	5.2	32.5	1 084.0	.064	.308	.415	.006	*.004
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	37.8	28.1	343.8	.103	(D)	(D)	*.011	.011
1542	Nonresidential buildings, n.e.c. -----	13.2	32.2	396.2	.115	.152	.609	.021	.005
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	23.6	36.3	205.7	.211	.350	.213	.211	.035
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	77.9	33.1	197.5	.199	.398	(D)	.019	.046
1623	Water, sewer, and utility lines -----	14.6	30.6	159.2	.233	.330	.163	.228	.024
1629	Heavy construction, n.e.c. -----	11.0	32.6	164.0	.248	.246	.183	.098	.051
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	9.0	32.2	145.0	.302	.360	.130	.513	.011
1721	Painting and paper hanging -----	5.0	25.0	83.9	.368	.262	.068	.572	.020
1731	Electrical work -----	8.1	31.6	108.4	.373	.393	.033	.510	.013
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6.4	22.5	80.6	.322	.377	.065	.849	.009
1742	Plastering, drywall, and insulation work -----	10.2	28.2	94.3	.361	.328	.108	.876	.013
1743	Terrazzo, tile, marble, and mosaic work -----	6.4	26.7	113.7	.322	.450	.041	.765	*.006
175	Carpentry and floor work:								
1751	Carpentry -----	4.7	19.1	90.0	.264	.365	.125	.554	.014
1752	Floor laying and other floor work -----	5.3	(S)	115.7	(S)	.402	(S)	(S)	.008
1761	Roofing, siding, and sheet metal work -----	9.2	25.8	126.1	.270	.438	.077	.518	.016
1771	Concrete work -----	5.9	23.5	108.2	.271	.414	.076	.637	.021
1781	Water well drilling -----	5.7	23.0	114.2	.251	.430	.029	.211	.015
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	19.1	35.3	118.8	.354	.238	.062	.916	.029
1793	Glass and glazing work -----	10.0	26.1	161.8	.249	.534	.106	.801	.029
1794	Excavation work -----	5.6	27.8	134.0	.263	.272	.129	.526	.035
1795	Wrecking and demolition work -----	7.8	26.8	129.9	.247	(D)	.138	.568	.094
1796	Installing building equipment, n.e.c. -----	20.0	31.5	125.7	.327	.247	.046	.304	.016
1799	Special trade contractors, n.e.c. -----	7.9	24.2	87.0	.352	(D)	.080	.397	.025

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	MINNEAPOLIS-ST. PAUL, MN-WI MSA											
15,16,17	Construction industries -----	6 022	57 068	1 746 540	8 585 142	5 752 252	3 678 458	2 286 669	2 832 890	121 034	2	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	1 062	3 861	82 032	626 103	390 582	188 316	220 047	235 521	4 817	5	6
1522	Other residential buildings -----	(S)	262	7 764	(D)	(D)	10 725	14 429	(D)	160	11	(D)
1531	Operative builders -----	262	1 418	47 540	748 053	432 744	226 664	224 836	315 308	2 236	9	12
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	55	3 453	97 561	(D)	(D)	(D)	89 017	(D)	3 116	32	(D)
1542	Nonresidential buildings, n.e.c. -----	312	5 062	178 218	1 681 161	598 535	409 322	224 271	1 082 626	11 821	5	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	58	2 566	110 089	491 100	(D)	259 259	185 415	(D)	15 773	9	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	99	1 743	57 377	227 036	193 336	122 453	71 725	33 700	10 907	6	5
1629	Heavy construction, n.e.c. -----	(S)	(S)	(S)	226 605	169 796	122 802	47 587	56 808	3 765	(S)	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning -----	741	8 160	285 960	925 290	804 519	490 228	320 279	120 771	11 453	2	2
1721	Painting and paper hanging -----	324	1 842	48 307	129 043	120 374	86 367	34 569	8 670	3 562	6	5
1731	Electrical work -----	609	6 540	229 404	590 947	568 679	363 501	228 857	22 268	7 916	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work -----	295	2 211	52 100	163 961	152 503	95 304	57 367	11 458	2 852	8	6
1742	Plastering, drywall, and insulation work -----	253	2 821	82 743	228 516	203 671	130 721	74 482	24 845	1 751	4	4
1743	Terrazzo, tile, marble, and mosaic work -----	95	667	18 025	55 508	53 217	31 866	25 037	*2 291	*483	10	11
175	Carpentry and floor work:											
1751	Carpentry -----	401	2 378	48 523	165 505	145 852	96 337	50 297	(S)	1 517	7	8
1752	Floor laying and other floor work -----	(S)	767	16 945	68 768	62 922	35 597	27 797	(S)	1 009	12	10
1761	Roofing, siding, and sheet metal work -----	266	2 638	73 765	275 409	250 765	138 446	121 455	24 643	4 399	5	4
1771	Concrete work -----	344	2 742	69 316	240 935	221 029	130 636	98 470	19 906	9 035	6	5
1781	Water well drilling -----	50	(D)	7 456	27 386	26 267	16 164	10 103	1 119	1 720	(D)	4
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	28	868	31 582	86 328	80 682	63 175	19 075	5 646	1 459	4	2
1793	Glass and glazing work -----	42	507	14 215	58 956	51 413	25 896	31 561	7 542	1 035	4	15
1794	Excavation work -----	182	1 341	38 777	146 365	124 409	97 940	33 708	21 955	11 458	9	6
1795	Wrecking and demolition work -----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	53	1 178	39 382	121 820	116 749	95 862	22 703	5 071	1 755	4	4
1799	Special trade contractors, n.e.c. -----	235	2 379	60 944	163 785	151 302	119 487	48 489	12 483	5 869	6	7

MN-14 MINNESOTA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Contents

Missouri

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Missouri. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 44,045 establishments in this State operating in the construction industries. These establishments accounted for \$11.8 billion in total dollar value of business done.

Most of the 44,045 construction establishments were small. Of the total, 31,217 were nonemployers, and over half of the employer establishments had less than 5 employees. The 4,829 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 82 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$11.0 billion in total dollar value of business done. Of this amount, \$10.8 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$2.8 billion, leaving net value of construction work of \$8.0 billion. In addition, these establishments paid out \$3.8 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$4.8 billion. (See Introduction and appendixes for explanation of terms.)

There were 12,828 establishments with total employment averaging 97,064 during the year. Total payroll for 1992 was \$2.4 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 31,217 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$769 million. Most of these establishments, about 82 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

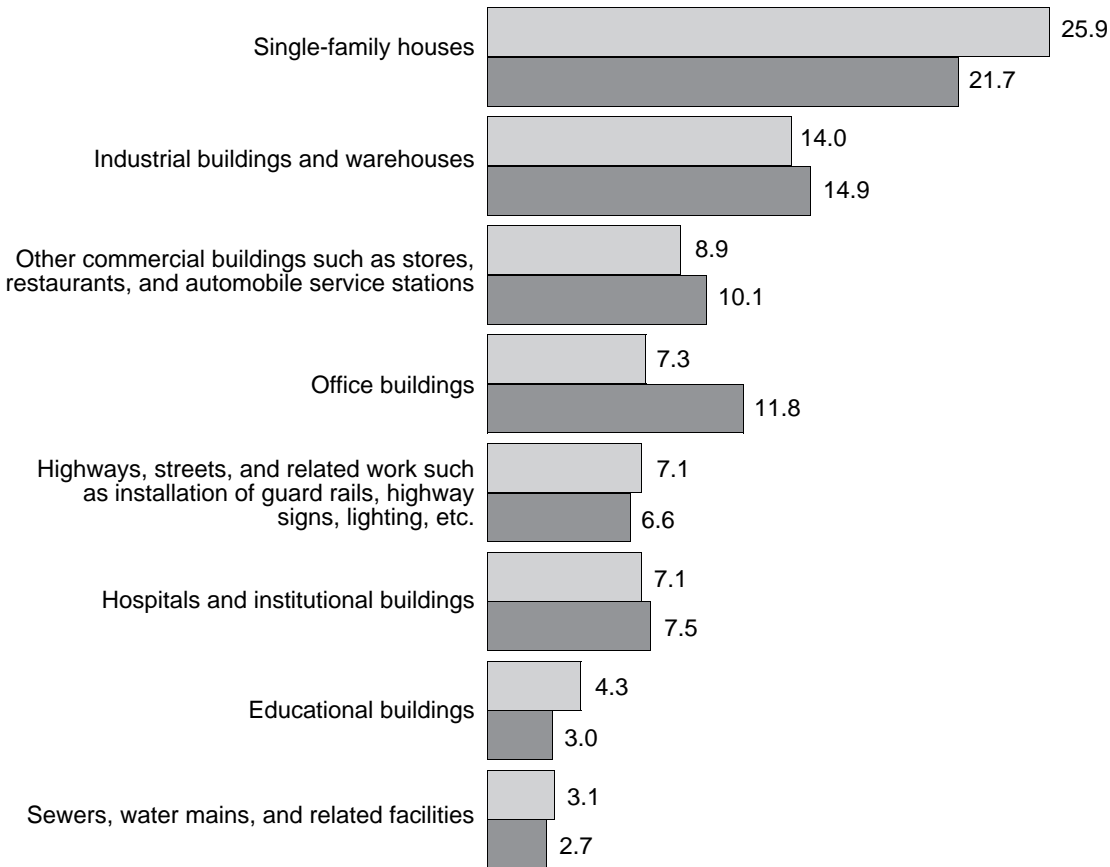




Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

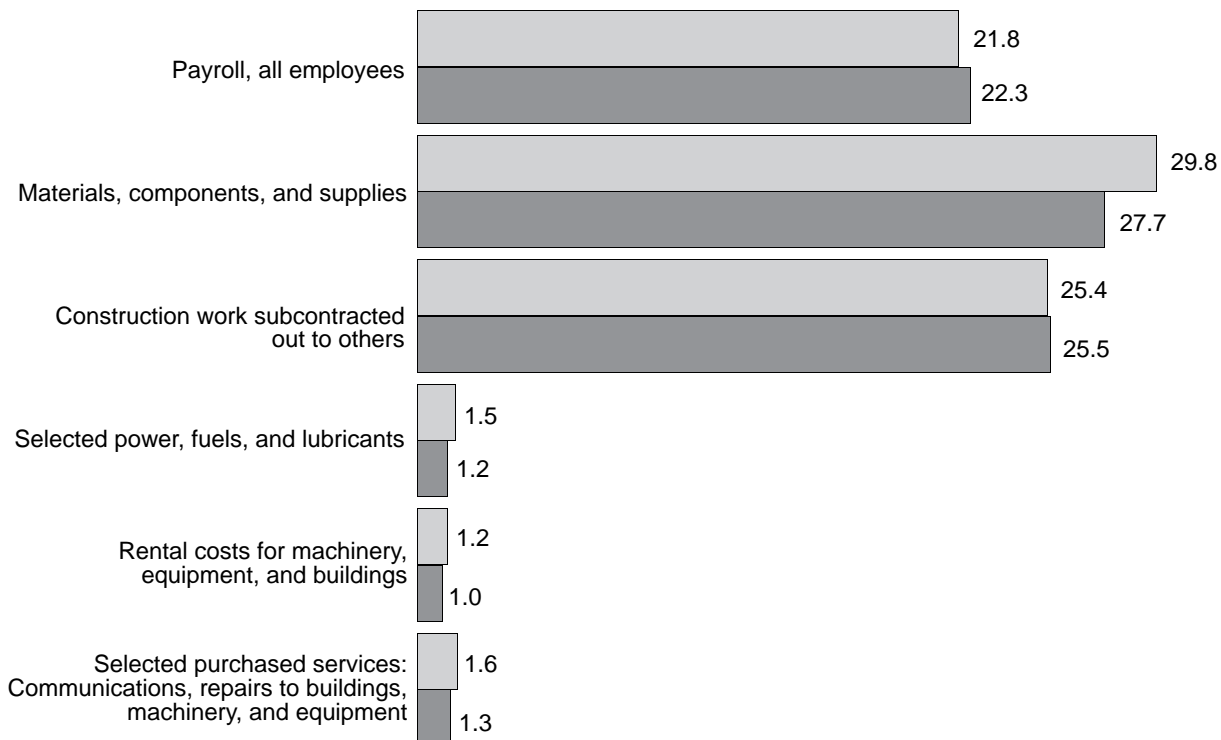


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	44 045	37 112	97 064	11 804 067	31 217	30 949	768 902	12 828	6 163	97 064	11 035 165	1	1
15	Building construction—General contractors and operative builders ----	9 052	6 838	25 212	4 962 777	5 185	4 956	294 849	3 867	1 882	25 212	4 667 928	2	2
16	Heavy construction other than building construction—contractors -----	1 441	917	13 921	1 935 938	536	520	16 440	905	397	13 921	1 919 498	2	2
17	Special trade contractors -----	33 552	29 357	57 931	4 905 352	25 496	25 473	457 613	8 056	3 884	57 931	4 447 739	1	1
1711	Plumbing, heating, and air-conditioning --	3 831	2 746	12 588	1 266 414	2 133	2 113	56 800	1 698	633	12 588	1 209 614	2	1
1731	Electrical work -----	2 307	1 666	8 737	731 343	1 416	1 400	24 233	891	266	8 737	707 110	2	2
	1987													
15, 16, 17	Construction industries² -----	46 787	38 010	105 191	12 415 405	35 330	34 825	1 454 682	11 457	3 185	105 191	10 960 723	1	1
15	Building construction—General contractors and operative builders ----	10 816	7 965	29 102	5 573 235	7 381	7 031	503 545	3 435	934	29 102	5 069 690	1	1
16	Heavy construction other than building construction—contractors -----	1 329	670	13 188	1 480 102	513	501	30 918	816	169	13 188	1 449 184	2	1
17	Special trade contractors -----	33 623	28 559	62 504	5 063 669	26 542	26 532	670 582	7 081	2 027	62 504	4 393 087	1	1
1711	Plumbing, heating, and air-conditioning --	3 741	2 614	13 070	1 311 794	2 321	2 313	89 952	1 420	301	13 070	1 221 842	2	1
1731	Electrical work -----	2 344	1 748	9 164	745 266	1 536	1 530	39 542	808	218	9 164	705 724	2	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	12 828	97 064	75 777	2 402 222	1 758 121	10 764 435	7 956 207	4 773 150
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	2 330	9 360	7 196	154 918	108 470	927 277	681 402	353 345
1522	Other residential buildings -----	170	900	(S)	18 125	10 882	(S)	(S)	(D)
1531	Operative builders -----	388	2 481	1 602	67 287	36 560	775 756	543 871	296 806
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	197	4 085	3 010	131 471	93 695	884 869	494 716	309 229
1542	Nonresidential buildings, n.e.c. -----	781	8 386	5 909	224 366	138 025	1 784 379	683 860	388 783
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	188	5 059	4 153	152 386	117 220	778 504	577 631	313 863
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	38	1 199	980	38 005	28 953	187 041	154 810	90 688
1623	Water, sewer, and utility lines -----	223	3 647	2 985	102 713	76 209	395 061	341 325	219 067
1629	Heavy construction, n.e.c. -----	456	4 017	3 355	103 916	84 238	498 716	391 804	(D)
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	1 698	12 588	9 488	357 367	266 489	1 199 720	1 033 047	600 699
1721	Painting and paper hanging -----	774	3 533	2 994	79 394	62 275	189 948	185 397	135 808
1731	Electrical work -----	891	8 737	6 706	246 536	181 004	702 057	672 730	419 205
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	540	4 311	3 836	81 122	67 572	202 474	194 512	134 687
1742	Plastering, drywall, and insulation work -----	425	3 778	3 179	95 728	78 303	236 275	213 284	143 975
1743	Terrazzo, tile, marble, and mosaic work -----	77	483	387	11 669	8 235	36 163	34 965	21 580
175	Carpentry and floor work:								
1751	Carpentry -----	812	3 942	3 222	78 550	60 542	267 881	228 992	152 684
1752	Floor laying and other floor work -----	262	1 513	1 100	34 179	24 063	120 061	114 746	57 815
1761	Roofing, siding, and sheet metal work -----	744	4 923	3 896	102 157	72 981	362 013	338 907	203 710
1771	Concrete work -----	744	5 030	4 283	99 414	77 906	329 350	309 788	177 880
1781	Water well drilling -----	56	310	225	6 616	4 514	25 173	24 782	13 276
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	70	1 520	1 213	50 775	38 762	192 371	170 763	122 110
1793	Glass and glazing work -----	66	400	266	10 915	6 962	38 868	38 515	19 018
1794	Excavation work -----	307	1 622	1 310	35 072	27 474	127 515	113 480	81 980
1795	Wrecking and demolition work -----	15	152	111	3 073	2 127	17 632	10 042	8 201
1796	Installing building equipment, n.e.c. -----	80	914	689	29 322	21 993	73 844	70 377	49 247
1799	Special trade contractors, n.e.c. -----	496	4 174	3 069	87 148	62 666	254 208	234 257	177 398

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
3 453 787	2 808 228	2 966 895	136 306	194 051	1 678 965	105 191	10 501 073	4 867 062	1	1	3	15, 16, 17
												15
360 548	245 875	48 833	7 452	7 682	57 859	8 054	675 705	302 189	4	6	14	152
47 432	(S)	834	1 059	982	(S)	1 271	205 348	46 160	18	(S)	39	1521
265 101	231 885	26 863	1 146	2 845	20 858	3 558	790 402	212 954	8	5	18	1531
(D)	390 152	25 638	7 103	6 132	86 512	4 963	962 729	358 337	3	2	7	154
333 078	1 100 518	92 409	11 860	8 219	114 575	11 256	2 094 156	677 353	3	4	11	1542
												16
292 881	200 873	144 806	19 910	36 260	292 171	6 123	769 810	396 673	3	3	7	1611
67 243	32 231	23 941	4 066	4 562	50 169	1 457	140 984	52 901	4	16	6	162
125 994	53 736	82 239	13 451	20 371	152 833	2 966	272 319	156 472	4	3	7	1622
185 730	106 912	67 381	13 296	26 322	198 391	2 642	239 753	131 140	4	4	14	1623
												17
442 243	166 673	640 084	13 966	23 368	152 295	13 070	1 208 907	569 311	2	2	10	1711
50 537	4 551	120 762	3 221	4 058	21 437	4 683	203 370	154 850	4	3	27	1721
258 578	29 327	433 348	6 183	12 307	95 240	9 164	698 478	438 183	2	2	17	1731
60 111	7 962	139 522	1 997	1 650	25 775	4 886	220 327	149 744	4	3	17	174
77 302	22 991	180 247	1 934	2 491	19 461	4 652	300 349	184 789	4	3	19	1742
14 048	1 198	26 788	*411	198	3 836	467	27 273	16 287	15	10	3	1743
(S)	(S)	125 139	1 591	3 308	18 214	4 298	231 853	129 783	6	8	16	175
59 149	(S)	105 583	1 421	1 107	16 312	1 140	86 718	48 736	10	12	33	1751
139 279	23 106	159 978	3 643	5 387	58 040	5 390	364 603	214 323	4	4	15	1761
134 326	19 561	196 189	5 646	10 053	86 948	6 306	400 481	233 113	5	4	16	1771
11 625	391	1 398	239	1 319	16 203	297	16 457	7 082	10	11	17	1781
(D)	21 608	96 235	4 370	1 626	26 037	1 031	64 911	46 720	6	4	21	179
20 359	353	28 355	421	554	3 381	620	54 134	28 267	10	14	20	1791
32 355	14 035	107 773	5 429	8 628	104 488	2 186	156 413	109 122	10	8	15	1793
2 159	7 590	6 264	918	404	3 533	107	12 822	8 646	14	13	(Z)	1794
(D)	3 468	19 759	1 461	1 082	8 396	822	65 086	44 696	5	5	13	1795
86 287	19 951	66 527	4 112	3 137	28 019	3 385	207 505	130 050	5	4	23	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	12 828	11 457	9 115	10 545	1	1	2	2
Proprietors and working partners	6 163	3 185	3 050	6 219	2	4	3	4
All employees**	97 064	105 191	84 620	89 395	1	1	1	1
Construction workers:								
March	69 086	76 086	61 765	66 041	1	1	1	1
May	77 324	84 933	70 297	77 190	1	1	1	2
August	82 863	89 520	72 314	81 750	1	1	1	1
November	73 834	82 630	66 531	75 878	1	1	1	1
Average	75 777	83 292	68 595	75 275	1	1	1	1
Other employees:								
March	21 217	21 769	15 972	13 481	1	1	1	1
May	21 704	21 905	(NA)	(NA)	1	1	(NA)	(NA)
August	21 172	22 089	(NA)	(NA)	1	1	(NA)	(NA)
November	21 054	21 832	(NA)	(NA)	1	1	(NA)	(NA)
Average	21 287	21 898	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	2 402 222	2 444 120	1 608 657	1 174 773	1	(Z)	1	1
Payroll, construction workers	1 758 121	1 796 436	1 236 615	936 178	1	1	1	1
Payroll, other employees	644 102	647 684	372 041	238 595	1	1	1	1
First-quarter payroll, all employees	520 386	554 220	347 687	235 826	1	1	1	1
Fringe benefits, all employees	641 327	590 724	274 897	217 641	1	1	1	1
Legally required expenditures	394 845	369 759	209 742	112 940	1	1	1	1
Voluntary expenditures	246 481	220 965	65 154	104 701	1	1	1	(Z)
Dollar value of business done	11 035 165	10 960 723	6 637 786	4 657 718	1	1	1	1
Value of construction work	10 764 435	10 501 073	6 450 207	4 500 045	1	1	1	1
Value of construction work subcontracted in from others	2 966 895	2 500 649	1 517 490	1 120 704	2	2	1	1
Other business receipts	270 729	338 330	151 815	157 673	7	2	2	3
Net value of construction†	7 956 207	7 702 288	4 645 229	3 425 673	1	1	1	1
Value added††	4 773 150	4 867 062	2 878 793	2 062 343	1	1	1	1
Selected costs	6 262 015	5 972 341	3 723 228	2 540 577	1	1	1	1
Materials, components, and supplies	3 283 988	3 038 390	1 812 668	1 382 127	1	1	1	1
Construction work subcontracted out to others	2 808 228	2 798 785	1 804 977	1 074 372	1	1	1	1
Selected power, fuels, and lubricants	169 799	135 165	105 582	84 077	2	1	1	1
Electricity	27 695	20 242	14 645	9 269	3	2	2	2
Natural gas	9 574	7 771	6 388	15 120	8	4	3	1
Gasoline and diesel fuel	122 403	98 700	76 869	49 461	2	1	2	1
On highway use	84 293	70 164	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use	38 110	28 536	(NA)	(NA)	3	3	(NA)	(NA)
Other, including lubricating oils and greases	10 126	8 451	7 679	10 228	3	4	3	3
Rental cost for machinery, equipment, and buildings	136 306	114 690	65 942	46 314	3	2	1	1
For machinery and equipment	96 483	78 665	48 597	38 076	3	2	2	1
For buildings	39 823	36 025	17 344	8 238	4	3	3	2
Selected purchased services	180 598	138 161	90 661	77 245	2	2	2	2
Communication services	46 161	35 587	24 051	17 920	3	2	2	2
Repairs to buildings and other structures	9 127	7 896	5 901	3 400	4	5	2	5
Repairs to machinery and equipment	125 310	94 677	60 708	55 925	3	2	2	2
Ownership of construction projects:								
Value of construction work	10 764 435	10 501 073	6 450 207	4 500 045	1	1	1	1
Government owned	2 566 642	2 174 832	1 242 260	882 779	2	2	2	1
Federal	683 313	540 094	(NA)	(NA)	4	3	(NA)	(NA)
State and local	1 883 329	1 634 737	(NA)	(NA)	3	2	(NA)	(NA)
Privately owned	8 197 793	8 326 241	5 207 946	3 617 267	2	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 555 384	1 321 453	2	3
Capital expenditures, other than land -----	194 051	152 912	3	3
New -----	144 171	111 495	4	3
Used -----	49 880	41 416	6	6
Retirements and disposition of depreciable assets -----	70 470	94 598	6	5
End-of-year gross book value of depreciable assets -----	1 678 965	1 379 767	2	2
Depreciation charges during year -----	162 429	157 741	3	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	195 132	294 898	4	9
Capital expenditures, other than land -----	12 780	21 051	12	8
New buildings and other structures -----	9 659	15 578	14	9
Used buildings and other structures -----	3 121	5 472	18	16
Retirements and disposition of depreciable assets -----	4 610	17 692	23	21
End-of-year gross book value of depreciable assets -----	203 301	298 257	4	8
Depreciation charges during year -----	14 316	20 186	7	8
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 360 252	1 026 555	2	2
Capital expenditures, other than land -----	181 271	131 860	3	3
New machinery and equipment, including automobiles and trucks -----	134 512	95 916	4	3
New automobiles and trucks, intended primarily for highway use -----	38 592	42 101	5	4
Used machinery and equipment, including automobiles and trucks -----	46 759	35 944	6	7
Retirements and disposition of depreciable assets -----	65 860	76 905	6	3
End-of-year gross book value of depreciable assets -----	1 475 663	1 081 510	2	2
Depreciation charges during year -----	148 112	137 555	3	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	12 828	1
Value of construction work	10 764 435	1
Establishments with inventories:		
Number	3 585	2
Value of construction work	5 040 980	1
Inventories ¹ :		
End of 1992, materials and supplies	142 371	4
End of 1991, materials and supplies	141 253	4
Establishments with no inventories:		
Number	4 970	2
Value of construction work	3 770 988	2
Establishments not reporting:		
Number	4 273	2
Value of construction work	1 952 467	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	12 828	8 000	2 683	1 232	671	162	64	10	6	1	
All employees** -----	97 064	15 107	16 971	16 037	19 702	11 022	9 637	3 517	5 071	(D)	
Payroll, all employees -----	2 402 222	226 241	327 326	385 825	539 954	322 938	305 638	118 727	175 573	(D)	
Dollar value of business done -----	11 035 165	1 366 214	1 454 426	1 646 226	2 163 502	1 401 299	1 298 987	634 070	1 070 441	(D)	
Value of construction work -----	10 764 435	1 347 309	1 413 016	1 628 545	2 123 689	1 361 378	1 252 705	615 506	1 022 288	(D)	
Net value of construction work† -----	7 956 207	1 092 135	1 121 459	1 279 047	1 628 221	979 466	931 446	389 738	534 695	(D)	
Value added†† -----	4 773 150	578 925	657 370	764 520	964 700	618 795	608 961	242 001	337 878	(D)	
Cost of materials, components, supplies, and fuels -----	3 453 787	532 115	505 499	532 208	703 334	400 592	368 767	166 301	244 970	(D)	
Cost of construction work subcontracted out to others -----	2 808 228	255 174	291 557	349 498	495 468	381 912	321 259	225 768	487 593	(D)	
Rental cost for machinery, equipment, and buildings -----	136 306	10 164	17 813	23 127	30 100	23 947	16 741	7 185	7 228	(D)	
Capital expenditures, other than land -----	194 051	28 818	25 732	31 111	34 083	26 190	15 552	27 237	5 328	(D)	
End-of-year gross book value of depreciable assets -----	1 678 965	176 791	212 717	254 101	335 520	267 711	189 807	150 079	92 239	(D)	
1987											
All employees** -----	105 191	13 542	15 939	18 056	23 405	11 711	10 731	5 666	6 137	(D)	
Value of construction work -----	10 501 073	1 098 788	1 130 071	1 354 870	2 363 988	1 466 273	1 137 596	1 949 486	(D)	(D)	
Value added†† -----	4 867 062	482 663	534 029	683 931	1 074 145	666 093	891 997	(D)	534 203	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	3	4	4	2	2	(Z)	(Z)	(Z)	(D)	
Net value of construction work† -----	1	4	5	4	2	1	(Z)	(Z)	(Z)	(D)	
Capital expenditures, other than land -----	3	13	14	10	4	(Z)	(Z)	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics		Establishments with dollar value of business done—									
		Total	Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	$10,000,000 or more
1992											
Number of establishments -----	12 828	(S)	(S)	2 180	3 292	2 249	1 433	995	426	190	138
All employees** -----	97 064	(S)	(S)	3 785	10 122	11 526	12 922	15 472	11 771	9 479	19 968
Payroll, all employees -----	2 402 222	(S)	(S)	45 058	146 115	205 947	275 233	397 927	335 745	282 008	697 546
Dollar value of business done -----	11 035 165	(S)	(S)	157 412	527 958	788 646	981 181	1 519 817	1 480 815	1 328 827	4 199 106
Value of construction work -----	10 764 435	(S)	(S)	155 067	523 290	771 437	969 056	1 497 552	1 432 364	1 303 796	4 060 990
Net value of construction work† -----	7 956 207	(S)	(S)	144 672	477 339	689 401	832 286	1 233 842	1 085 736	969 356	2 476 196
Value added†† -----	4 773 150	(S)	(S)	90 417	291 694	386 325	491 111	744 829	673 926	550 454	1 516 194
Cost of materials, components, supplies, and fuels -----	3 453 787	(S)	(S)	56 600	190 314	320 286	353 300	511 277	460 262	443 933	1 098 117
Cost of construction work subcontracted out to others -----	2 808 228	(S)	(S)	10 395	45 951	82 036	136 769	263 710	346 628	334 440	1 584 795
Rental cost for machinery, equipment, and buildings -----	136 306	(S)	(S)	(S)	5 577	10 182	16 411	20 098	20 929	14 693	45 775
Capital expenditures, other than land -----	194 051	(S)	(S)	(S)	16 043	22 073	19 996	29 796	20 610	15 958	64 614
End-of-year gross book value of depreciable assets -----	1 678 965	(S)	(S)	(S)	98 372	156 767	167 125	249 607	215 826	176 057	575 142
1987											
All employees** -----	105 191	(S)	(S)	(S)	11 573	11 176	14 100	17 422	12 727	9 843	23 093
Value of construction work -----	10 501 073	(S)	(S)	(S)	531 388	614 274	989 902	1 569 396	1 240 408	1 142 011	4 258 142
Value added†† -----	4 867 062	(S)	(S)	(S)	287 492	330 447	512 912	772 599	639 462	536 763	1 698 103
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	7	5	5	5	3	3	2	(Z)
Net value of construction work† -----	1	(S)	(S)	5	4	5	5	4	4	4	1
Capital expenditures, other than land -----	3	(S)	(S)	(S)	20	16	13	10	4	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	10 764 435	6 459 426	2 749 378	1 229 912	1	1	1	2
Building construction	8 028 208	4 926 358	2 256 915	844 934	1	2	2	2
Single-family houses	2 789 997	2 064 801	450 033	275 164	3	3	4	5
Single-family houses, detached	2 596 376	1 938 043	419 322	239 012	3	3	4	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	193 620	126 758	30 711	36 152	11	14	16	22
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	235 618	152 353	41 826	41 439	16	25	8	9
Other residential buildings, including hotels, motels, and tourist cabins	122 366	52 152	55 741	14 473	9	14	9	15
Office buildings	786 150	394 231	304 169	87 749	3	1	7	4
Other commercial buildings such as stores, restaurants, and automobile service stations	961 474	554 189	280 199	127 085	3	3	4	5
Industrial buildings and warehouses	1 504 810	819 204	508 924	176 682	1	1	1	4
Industrial buildings	1 263 053	663 750	449 826	149 477	1	1	1	4
Warehouses	241 757	155 454	59 098	27 205	4	5	6	6
Religious buildings	150 825	90 190	46 521	14 114	13	21	6	8
Educational buildings	460 671	261 961	162 116	36 594	3	2	5	8
Hospitals and institutional buildings	761 220	357 865	358 044	45 311	1	1	2	4
Amusement, social, and recreational buildings, indoors	123 026	97 587	19 768	5 672	2	2	3	5
Other nonresidential buildings	132 051	81 825	29 575	20 651	8	9	7	33
Nonbuilding construction	2 410 509	1 533 068	492 463	384 979	2	2	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	762 370	443 136	166 035	153 198	3	3	3	6
Airport runways and related work	73 115	(D)	(D)	(D)	3	(D)	(D)	(D)
Private driveways and parking areas	74 778	34 230	17 366	23 183	9	11	14	16
Recreational facilities	67 149	65 069	* 1 980	* 101	19	19	51	59
Bridges, tunnels, and elevated highways	217 971	191 579	15 916	10 476	12	13	8	17
Dam and reservoir construction	17 128	(D)	(D)	(D)	3	(D)	(D)	(D)
Conservation and development construction	76 801	28 393	43 040	5 368	8	13	9	17
Power and communication transmission lines, towers, and related facilities	155 846	107 028	12 378	36 440	5	6	8	6
Sewers, water mains, and related facilities	331 612	221 094	83 612	26 906	3	5	2	9
Sewers, sewer lines, septic systems, and related facilities	209 202	118 344	73 813	17 045	3	5	2	9
Water mains and related facilities	122 411	102 750	9 800	9 861	6	6	9	13
Blast furnaces, petroleum refineries, chemical complexes, etc.	164 240	45 623	37 843	80 774	1	(Z)	(Z)	2
Power plants	92 357	48 474	27 033	16 850	2	2	2	8
Sewage treatment and water treatment plants	194 167	136 448	52 522	5 196	7	6	10	23
Sewage treatment plants	126 477	94 777	28 964	2 736	7	5	11	34
Water treatment plants	67 689	41 671	23 558	2 460	8	8	9	30
Other nonbuilding construction	182 974	135 561	21 823	25 590	4	4	11	12
Construction work, n.s.k.	325 719	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
1987								
Value of construction work	10 501 073	7 001 958	2 104 815	1 028 725	1	1	1	2
Building construction	8 284 683	5 758 206	1 746 400	752 233	1	1	1	2
Single-family houses	2 281 804	1 727 313	327 306	227 184	2	3	4	5
Single-family houses, detached	2 034 970	1 536 381	294 199	204 390	2	3	5	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	246 833	190 932	33 106	22 794	5	6	15	10
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	368 117	266 757	66 385	34 974	7	9	13	6
Other residential buildings, including hotels, motels, and tourist cabins	357 478	299 999	34 965	22 514	3	3	13	10
Office buildings	1 239 365	901 226	241 209	96 929	1	1	2	2
Other commercial buildings such as stores, restaurants, and automobile service stations	1 062 840	700 959	266 046	95 834	3	3	4	4
Industrial buildings and warehouses	1 563 155	1 027 283	373 755	162 116	1	1	2	2
Industrial buildings	1 258 228	806 619	314 858	136 750	1	1	1	2
Warehouses	304 926	220 663	58 897	25 366	3	3	7	5
Religious buildings	106 350	52 990	38 191	15 168	4	5	5	8
Educational buildings	315 869	178 627	103 161	34 080	3	3	5	6
Hospitals and institutional buildings	788 361	502 560	248 738	37 062	1	1	2	3
Amusement, social, and recreational buildings, indoors	79 683	44 267	22 383	13 032	6	3	11	21
Other nonresidential buildings	121 661	79 818	24 672	17 180	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	1 850 816	1 220 159	358 004	272 652	1	2	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	688 642	421 914	184 118	82 609	2	2	3	6
Bridges, tunnels, and elevated highways	152 813	109 073	29 763	13 976	5	6	2	25
Power and communication transmission lines, towers, and related facilities	89 703	47 471	18 079	24 152	7	8	18	4
Sewers, water mains, and related facilities	283 081	237 993	28 017	17 070	3	3	4	14
Sewers, sewer lines, septic systems, and related facilities	198 378	163 392	24 692	10 293	3	2	4	17
Water mains and related facilities	84 702	74 600	3 325	6 776	6	6	11	16
Blast furnaces, petroleum refineries, chemical complexes, etc.	70 936	29 211	25 133	16 591	1	1	(Z)	6
Power plants	53 740	33 600	4 751	15 388	7	8	31	10
Sewage treatment and water treatment plants	133 338	105 954	22 157	5 226	3	3	6	5
Sewage treatment plants	90 713	69 323	17 911	3 478	3	3	6	7
Water treatment plants	42 625	36 630	4 246	1 748	6	6	16	6
Other nonbuilding construction	378 562	234 943	45 958	97 639	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	365 574	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. **Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	12 828	75 777	69 086	77 324	82 863	73 834	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	2 330	7 196	6 915	7 423	7 621	6 825	3	5	5	5	5	5
1522	Other residential buildings -----	170	(S)	(S)	(S)	559	(S)	18	(S)	(S)	(S)	20	(S)
1531	Operative builders -----	388	1 602	1 496	1 680	1 728	1 505	10	9	9	9	9	9
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	197	3 010	2 894	3 091	3 082	2 975	13	4	4	4	4	3
1542	Nonresidential buildings, n.e.c. -----	781	5 909	5 527	5 976	6 364	5 770	7	4	3	3	4	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	188	4 153	2 855	4 669	5 427	3 663	10	3	3	3	3	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	38	980	840	1 094	1 168	818	17	4	3	5	5	5
1623	Water, sewer, and utility lines -----	223	2 985	2 784	3 035	3 182	2 939	9	4	4	4	5	4
1629	Heavy construction, n.e.c. -----	456	3 355	2 835	3 573	3 900	3 114	8	4	5	4	4	5
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 698	9 488	8 816	9 287	9 679	10 171	2	2	2	2	2	2
1721	Painting and paper hanging -----	774	2 994	2 584	3 091	3 412	2 888	3	4	5	4	4	5
1731	Electrical work -----	891	6 706	6 452	6 463	7 203	6 705	3	2	2	2	3	3
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	540	3 836	3 663	4 070	3 890	3 720	4	4	4	4	4	4
1742	Plastering, drywall, and insulation work -----	425	3 179	2 998	3 047	3 450	3 221	6	4	4	4	5	4
1743	Terrazzo, tile, marble, and mosaic work -----	77	387	384	376	444	346	10	16	13	21	21	16
175	Carpentry and floor work:												
1751	Carpentry -----	812	3 222	2 974	3 236	3 582	3 097	5	6	6	5	6	6
1752	Floor laying and other floor work -----	262	1 100	1 086	1 067	1 168	1 079	9	10	11	11	10	10
1761	Roofing, siding, and sheet metal work -----	744	3 896	3 350	3 891	4 454	3 890	4	4	4	4	4	4
1771	Concrete work -----	744	4 283	3 604	4 583	4 978	3 969	5	5	5	5	5	5
1781	Water well drilling -----	56	225	211	224	241	223	9	7	6	6	6	9
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	70	1 213	1 242	1 035	1 303	1 270	11	7	7	8	8	7
1793	Glass and glazing work -----	66	266	252	241	278	292	18	9	9	9	10	9
1794	Excavation work -----	307	1 310	1 143	1 329	1 479	1 287	9	9	10	9	9	9
1795	Wrecking and demolition work -----	15	111	110	118	121	96	21	11	8	13	13	7
1796	Installing building equipment, n.e.c. -----	80	689	636	628	722	768	13	5	5	6	5	5
1799	Special trade contractors, n.e.c. -----	496	3 069	2 789	3 399	3 430	2 659	8	5	5	6	6	6

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	7.6	24.7	142.1	.223	.321	.261	.276	.013
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.0	16.6	128.9	.167	.389	.265	.053	.008
1522	Other residential buildings -----	5.3	20.1	(S)	(S)	(S)	(S)	(S)	(S)
1531	Operative builders -----	6.4	27.1	484.2	.087	.342	.299	.035	.001
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	20.7	32.2	294.0	.149	(D)	.441	.029	.008
1542	Nonresidential buildings, n.e.c. -----	10.7	26.8	302.0	.126	.187	.617	.052	.007
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	27.0	30.1	187.5	.196	.376	.258	.186	.026
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	31.3	31.7	190.9	.203	.360	.172	.128	.022
1623	Water, sewer, and utility lines -----	16.3	28.2	132.3	.260	.319	.136	.208	.034
1629	Heavy construction, n.e.c. -----	8.8	25.9	148.6	.208	.372	.214	.135	.027
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	7.4	28.4	126.4	.298	.369	.139	.534	.012
1721	Painting and paper hanging -----	4.6	22.5	63.4	.418	.266	.024	.636	.017
1731	Electrical work -----	9.8	28.2	104.7	.351	.368	.042	.617	.009
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	8.0	18.8	52.8	.401	.297	.039	.689	.010
1742	Plastering, drywall, and insulation work -----	8.9	25.3	74.3	.405	.327	.097	.763	.008
1743	Terrazzo, tile, marble, and mosaic work -----	6.3	24.2	93.4	.323	.388	.033	.741	*.011
175	Carpentry and floor work:								
1751	Carpentry -----	4.9	19.9	83.1	.293	(S)	(S)	.467	.006
1752	Floor laying and other floor work -----	5.8	22.6	109.1	.285	.493	(S)	.879	.012
1761	Roofing, siding, and sheet metal work -----	6.6	20.8	92.9	.282	.385	.064	.442	.010
1771	Concrete work -----	6.8	19.8	76.9	.302	.408	.059	.596	.017
1781	Water well drilling -----	5.5	21.3	111.9	.263	.462	.016	.056	.009
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	21.8	33.4	158.6	.264	(D)	.112	.500	.023
1793	Glass and glazing work -----	6.0	27.3	146.1	.281	.524	.009	.730	.011
1794	Excavation work -----	5.3	21.6	97.3	.275	.254	.110	.845	.043
1795	Wrecking and demolition work -----	10.3	20.2	158.8	.174	.122	.430	.355	.052
1796	Installing building equipment, n.e.c. -----	11.5	32.1	107.2	.397	(D)	.047	.268	.020
1799	Special trade contractors, n.e.c. -----	8.4	20.9	82.8	.343	.339	.078	.262	.016

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	KANSAS CITY, MO-KS MSA											
15,16,17	Construction industries	4 037	37 512	941 580	4 126 782	3 085 130	1 805 277	1 364 250	1 041 652	79 702	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	590	2 551	46 101	332 376	217 338	111 888	126 959	115 039	3 197	12	21
1522	Other residential buildings	(S)	568	12 873	56 072	38 430	20 046	18 445	17 643	(D)	15	12
1531	Operative builders	131	392	8 673	193 797	127 409	44 664	86 052	66 388	1 310	22	19
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	731	21 688	144 066	90 960	55 181	36 811	53 106	902	9	7
1542	Nonresidential buildings, n.e.c.	252	3 129	85 789	751 948	282 190	147 217	148 004	469 758	4 302	4	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	69	2 196	65 260	276 991	209 663	124 216	103 186	67 329	18 728	5	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	14	672	20 182	116 127	93 920	54 520	42 917	22 207	3 104	7	26
1623	Water, sewer, and utility lines	99	2 477	77 243	268 061	232 664	149 464	83 857	35 396	13 566	5	2
1629	Heavy construction, n.e.c.	91	988	22 275	111 239	96 129	58 782	37 859	(S)	(S)	7	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	510	5 231	155 548	598 072	515 266	289 031	229 680	82 807	7 190	3	4
1721	Painting and paper hanging	299	1 484	30 176	72 217	69 428	50 481	19 044	2 789	(S)	7	6
1731	Electrical work	290	3 033	86 252	263 555	249 272	151 491	99 765	14 283	3 257	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	161	2 288	35 753	91 475	89 171	63 665	25 544	2 304	694	4	5
1742	Plastering, drywall, and insulation work	145	1 337	31 302	81 909	71 238	47 613	27 342	10 671	773	7	6
1743	Terrazzo, tile, marble, and mosaic work	22	182	5 501	(D)	14 540	8 455	6 382	(D)	147	10	8
175	Carpentry and floor work:											
1751	Carpentry	324	1 457	27 861	(S)	(S)	53 914	(S)	(S)	1 675	9	(S)
1752	Floor laying and other floor work	105	493	11 598	38 034	34 310	20 000	15 287	(S)	175	13	12
1761	Roofing, siding, and sheet metal work	(S)	2 299	52 592	168 964	161 388	104 669	58 931	7 575	2 983	7	3
1771	Concrete work	316	2 638	51 550	174 396	166 206	89 534	78 101	8 190	5 326	6	6
1781	Water well drilling	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	22	566	15 341	41 338	38 687	26 200	13 133	2 651	221	7	5
1793	Glass and glazing work	26	(D)	(D)	17 085	16 875	(D)	9 683	210	167	(D)	19
1794	Excavation work	71	548	14 725	47 600	40 718	30 508	10 419	6 882	3 308	11	10
1795	Wrecking and demolition work	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	47	545	21 278	58 362	52 362	37 261	15 385	6 000	879	8	8
1799	Special trade contractors, n.e.c.	(S)	1 422	33 993	83 840	74 744	52 842	26 455	9 096	1 068	7	7
	ST. LOUIS, MO-IL MSA											
15,16,17	Construction industries	6 082	55 365	1 548 072	6 937 162	4 977 510	3 106 041	2 055 513	1 959 652	99 753	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 113	5 395	100 063	547 029	406 977	217 550	195 903	140 051	5 377	6	8
1522	Other residential buildings	(S)	463	11 296	(S)	(S)	(S)	(S)	(S)	(S)	28	(S)
1531	Operative builders	175	1 825	56 639	618 927	439 125	251 807	201 479	179 803	2 002	7	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	89	2 953	102 976	690 995	377 033	244 934	179 810	313 962	4 853	2	1
1542	Nonresidential buildings, n.e.c.	336	4 407	135 675	1 215 224	399 504	236 786	194 070	815 720	4 492	4	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	106	2 414	74 124	392 285	280 219	161 796	134 227	112 066	10 436	6	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	17	417	17 276	76 814	62 811	34 589	28 557	14 003	1 849	6	4
1623	Water, sewer, and utility lines	104	1 858	52 923	212 691	188 279	132 470	56 327	24 412	12 425	5	5
1629	Heavy construction, n.e.c.	159	2 487	82 619	351 757	286 491	187 106	116 320	65 266	15 566	4	3

MO-14 MISSOURI

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	ST. LOUIS, MO-IL MSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	840	6 732	214 643	653 031	556 451	333 009	228 900	96 580	11 327	3	2
1721	Painting and paper hanging-----	449	2 425	60 781	146 028	143 220	104 480	38 788	2 808	2 551	5	4
1731	Electrical work -----	373	5 162	167 446	449 043	430 218	281 704	155 770	18 825	7 643	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	280	1 857	46 197	120 933	115 491	75 298	40 439	5 442	853	8	7
1742	Plastering, drywall, and insulation work -----	183	2 179	64 292	150 344	135 241	92 248	46 684	15 103	762	6	4
1743	Terrazzo, tile, marble, and mosaic work -----	52	299	6 988	22 027	(D)	13 714	8 306	(D)	33	24	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	378	2 141	49 587	167 291	143 471	100 895	46 046	(S)	1 990	9	12
1752	Floor laying and other floor work ---	(S)	1 160	27 118	92 397	90 965	45 174	47 431	(S)	1 071	13	14
1761	Roofing, siding, and sheet metal work -----	356	2 661	58 212	203 364	190 098	113 230	79 437	13 266	1 972	6	5
1771	Concrete work -----	(S)	2 978	72 139	221 714	206 387	121 185	85 669	15 327	5 452	5	4
1781	Water well drilling -----	13	178	4 483	14 766	14 545	8 226	6 400	221	811	15	18
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	43	1 024	37 073	149 533	130 566	93 299	37 267	18 967	998	8	5
1793	Glass and glazing work -----	31	190	5 788	22 235	22 163	11 483	11 287	(S)	198	15	21
1794	Excavation work -----	122	805	17 955	76 551	60 814	42 752	18 837	15 737	3 837	10	8
1795	Wrecking and demolition work -----	*19	149	2 910	18 084	(D)	9 035	1 607	(D)	272	18	(D)
1796	Installing building equipment, n.e.c. -	35	471	16 230	38 473	37 804	27 027	11 101	669	447	8	7
1799	Special trade contractors, n.e.c.-----	215	2 735	62 642	191 574	176 777	139 395	60 934	14 797	1 833	6	5

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Nebraska

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Nebraska. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 13,610 establishments in this State operating in the construction industries. These establishments accounted for \$3.6 billion in total dollar value of business done.

Most of the 13,610 construction establishments were small. Of the total, 9,286 were nonemployers, and over half of the employer establishments had less than 5 employees. The 1,742 construction establishments with 5 employees or more, while representing only 13 percent of all establishments, accounted for more than 83 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$3.4 billion in total dollar value of business done. Of this amount, \$3.3 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$739 million, leaving net value of construction work of \$2.6 billion. In addition, these establishments paid out \$1.3 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$1.4 billion. (See Introduction and appendixes for explanation of terms.)

There were 4,324 establishments with total employment averaging 30,092 during the year. Total payroll for 1992 was \$650 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 9,286 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$219 million. Most of these establishments, about 85 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

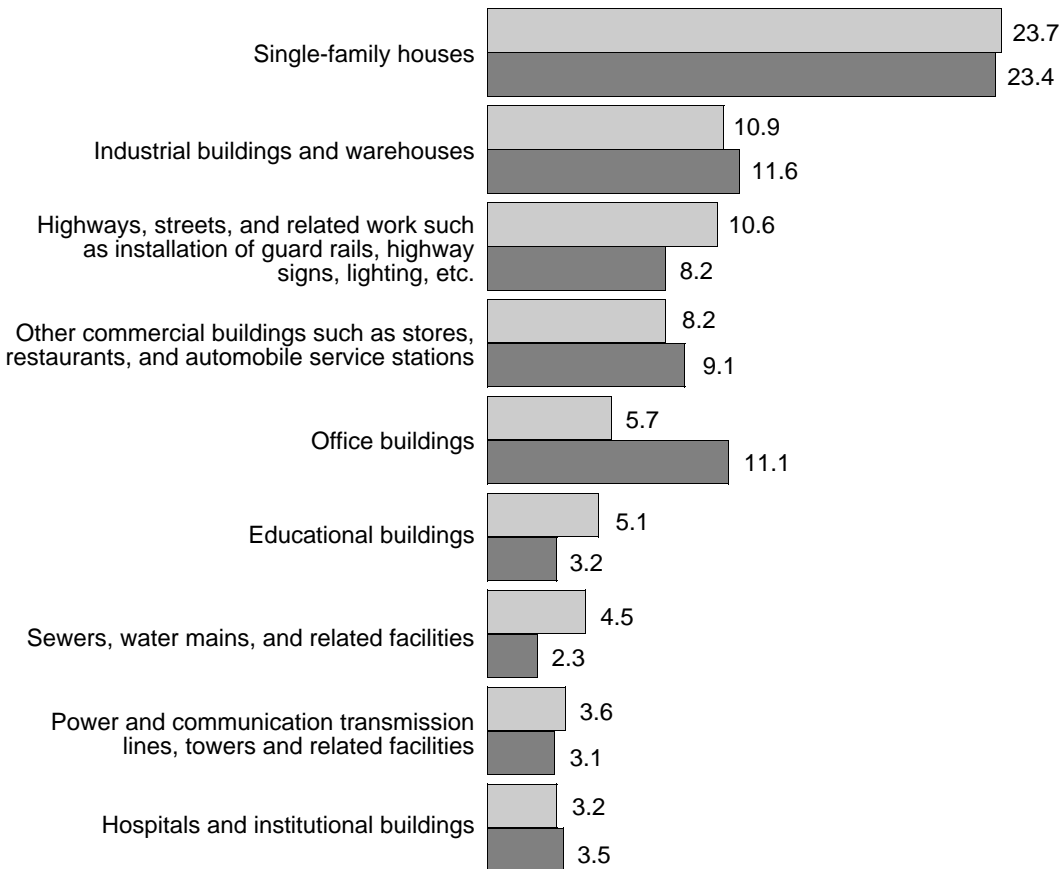




Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

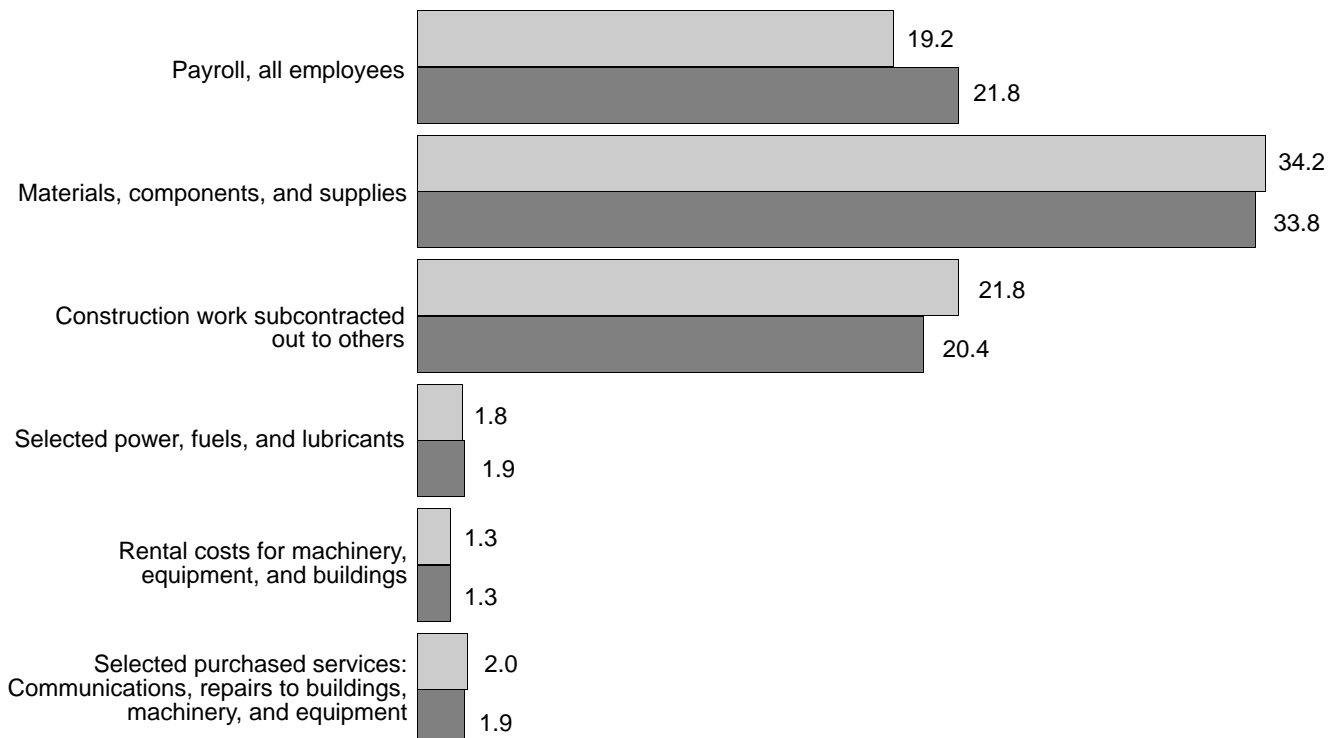


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	13 610	11 243	30 092	3 605 219	9 286	9 236	219 400	4 324	2 007	30 092	3 385 819	1	2
15	Building construction—General contractors and operative builders ----	2 445	1 730	7 224	1 160 085	1 203	1 138	60 116	1 242	592	7 224	1 099 969	3	3
16	Heavy construction other than building construction—contractors -----	567	278	5 328	996 696	165	162	5 565	402	116	5 328	991 131	4	4
17	Special trade contractors -----	10 598	9 235	17 540	1 448 438	7 918	7 936	153 719	2 680	1 299	17 540	1 294 719	2	2
1711	Plumbing, heating, and air-conditioning --	1 159	721	4 824	416 947	538	531	16 012	621	190	4 824	400 935	3	3
1731	Electrical work -----	1 068	866	2 587	216 997	672	670	14 335	396	196	2 587	202 662	3	3
	1987													
15, 16, 17	Construction industries² -----	14 181	11 418	26 566	2 557 914	10 315	10 145	358 519	3 866	1 273	26 566	2 199 395	2	2
15	Building construction—General contractors and operative builders ----	3 002	2 182	(D)	(D)	1 963	1 836	121 946	1 039	346	(D)	(D)	(D)	(D)
16	Heavy construction other than building construction—contractors -----	508	246	4 648	421 351	190	188	16 013	318	58	4 648	405 338	3	3
17	Special trade contractors -----	10 489	8 855	(D)	(D)	8 020	8 007	196 271	2 469	848	(D)	(D)	(D)	(D)
1711	Plumbing, heating, and air-conditioning --	1 162	725	3 611	287 084	639	633	27 533	523	92	3 611	259 551	6	4
1731	Electrical work -----	1 081	838	2 641	198 113	677	667	20 642	404	171	2 641	177 471	3	5

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	4 324	30 092	23 444	650 066	471 512	3 314 534	2 575 274	1 427 450
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	691	2 501	1 926	39 004	28 828	237 662	181 886	87 792
1522	Other residential buildings -----	48	396	318	6 796	4 786	33 633	23 372	17 173
1531	Operative builders -----	112	546	279	14 777	5 361	234 080	150 505	68 173
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	80	1 008	776	27 654	17 605	175 019	118 217	57 885
1542	Nonresidential buildings, n.e.c. -----	311	2 773	2 068	56 146	37 176	399 112	192 752	100 685
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction -----	69	2 237	1 888	58 333	43 602	316 362	246 376	123 144
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	6	63	50	2 054	1 267	14 658	11 490	7 425
1623	Water, sewer, and utility lines -----	95	1 179	926	29 944	22 796	186 223	158 051	54 957
1629	Heavy construction, n.e.c. -----	232	1 848	1 412	49 474	37 575	456 265	329 602	216 866
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	621	4 824	3 542	114 353	81 413	397 357	361 770	194 045
1721	Painting and paper hanging -----	194	909	773	15 610	12 399	45 564	43 032	32 253
1731	Electrical work -----	396	2 587	1 995	62 156	47 009	196 793	191 651	108 278
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	166	974	880	16 571	14 288	49 744	42 074	30 549
1742	Plastering, drywall, and insulation work -----	132	1 247	1 069	26 095	21 073	85 369	76 441	50 809
1743	Terrazzo, tile, marble, and mosaic work -----	21	109	79	2 205	1 637	8 327	8 201	6 734
175	Carpentry and floor work:								
1751	Carpentry -----	328	1 322	1 065	22 229	16 670	84 347	72 877	46 754
1752	Floor laying and other floor work -----	66	262	211	4 289	3 033	31 555	26 904	13 936
1761	Roofing, siding, and sheet metal work -----	192	1 448	1 108	25 614	17 400	98 462	89 219	46 750
1771	Concrete work -----	178	1 235	1 091	22 418	17 859	89 442	83 574	46 363
1781	Water well drilling -----	100	539	399	11 898	8 642	48 251	47 456	27 750
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	30	288	225	5 509	4 239	11 625	(D)	10 087
1793	Glass and glazing work -----	23	153	96	2 918	1 767	9 771	9 678	5 585
1794	Excavation work -----	85	539	452	13 046	9 904	42 170	39 546	30 532
1795	Wrecking and demolition work -----	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	25	411	262	8 516	5 949	22 623	22 264	17 059
1799	Special trade contractors, n.e.c. -----	119	(D)	(D)	(D)	(D)	(D)	(D)	(D)

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
1 219 109	739 261	836 103	43 488	67 544	581 505	26 566	2 137 566	952 428	1	1	5	15, 16, 17
												15
99 407 7 038	55 776 10 261	(S) (S)	1 975 *220	3 206 *482	21 451 *3 455	2 037 176	168 995 27 567	59 157 5 199	8 27	9 26	20 50	152 1521 1522
84 580	83 575	5 336	592	2 983	16 598	(D)	(D)	(D)	11	8	12	1531
63 246 101 215	56 802 206 360	8 814 11 515	683 3 595	2 281 5 437	38 357 44 573	737 3 163	86 354 435 551	28 269 131 741	11 6	6 6	14 19	154 1541 1542
												16
123 860	69 987	63 512	7 091	11 625	111 185	2 032	208 193	86 932	6	8	13	1611
4 065 105 918 126 906	3 168 28 172 126 663	1 659 32 389 15 054	109 5 674 7 263	385 6 025 9 301	5 032 40 568 82 907	292 1 388 936	24 245 75 620 89 505	10 205 34 900 53 864	(Z) 10 5	(Z) 8 2	(Z) 21 15	162 1622 1623 1629
												17
171 302	35 587	199 440	4 854	6 949	56 981	3 611	254 436	129 684	3	3	18	1711
10 827	2 532	19 587	953	*2 050	7 613	861	35 478	25 152	9	8	70	1721
89 242	5 142	113 401	1 772	2 623	27 607	2 641	175 141	101 639	3	3	10	1731
14 857 27 190 4 055	*7 670 8 928 *126	32 232 88 589 *10 164	493 *1 445 *171	752 866 *297	5 997 8 303 2 650	901 1 235 75	28 991 72 562 4 502	18 807 41 936 3 034	9 8 27	7 6 25	14 32 53	174 1741 1742 1743
30 718 13 663	11 471 *4 651	40 427 24 257	646 196	1 467 162	8 853 1 970	874 217	47 319 17 496	22 736 7 765	9 13	10 25	18 23	175 1751 1752
43 019	9 243	37 338	1 035	*1 264	11 633	1 419	86 022	46 770	6	6	41	1761
37 758	5 867	44 383	1 341	2 569	21 366	1 427	66 191	35 031	11	9	21	1771
22 640	795	1 333	295	1 311	29 270	335	25 119	11 729	8	8	22	1781
(D) 5 429 10 029 (D) (D) 6 052 (D)	(D) 93 2 625 (D) (D) 359 (D)	8 655 7 236 26 386 (D) (D) 11 401 (D)	299 219 1 660 (D) 265 (D)	285 275 3 365 (D) — 716 869	2 604 1 078 19 167 (D) 5 054 (D)	190 177 329 (D) 358 666	8 182 13 363 19 309 (D) (D) 22 374 27 117	6 545 6 942 14 629 (D) (D) 17 243 18 279	28 2 12 (D) (D) 8 (D)	(D) 2 13 (D) (D) 5 (D)	(Z) 2 11 — (Z) 37	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	4 324	3 866	4 169	4 946	1	1	2	3
Proprietors and working partners	2 007	1 273	1 854	3 283	3	6	5	5
All employees**	30 092	26 566	27 200	35 975	1	2	2	1
Construction workers:								
March	20 357	17 699	17 972	26 626	1	2	2	2
May	24 421	21 637	21 775	32 273	1	3	2	2
August	25 933	23 359	24 676	34 193	1	2	2	2
November	23 065	20 894	22 725	30 428	1	2	2	2
Average	23 444	20 897	22 216	30 905	1	2	2	2
Other employees:								
March	6 603	5 633	4 966	4 945	2	2	3	2
May	6 544	5 692	(NA)	(NA)	2	4	(NA)	(NA)
August	6 674	5 600	(NA)	(NA)	2	2	(NA)	(NA)
November	6 770	5 751	(NA)	(NA)	2	2	(NA)	(NA)
Average	6 648	5 669	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	650 066	479 247	459 659	438 003	1	1	1	1
Payroll, construction workers	471 512	349 591	366 318	356 121	1	1	1	1
Payroll, other employees	178 554	129 656	93 340	81 881	2	2	2	1
First-quarter payroll, all employees	131 500	100 113	92 311	89 886	2	2	2	1
Fringe benefits, all employees	135 870	96 412	83 976	69 169	2	2	2	1
Legally required expenditures	93 236	66 917	63 672	42 548	2	2	2	1
Voluntary expenditures	42 634	29 494	20 304	26 621	2	2	2	1
Dollar value of business done	3 385 819	2 199 395	1 734 891	1 932 259	2	2	2	1
Value of construction work	3 314 534	2 137 566	1 689 207	1 872 480	2	2	2	1
Value of construction work subcontracted in from others	836 103	500 366	372 138	391 214	4	4	3	2
Other business receipts	71 285	46 719	39 207	59 779	7	7	5	4
Net value of construction†	2 575 274	1 689 401	1 403 600	1 544 097	1	2	2	1
Value added††	1 427 450	952 428	801 343	906 507	1	2	2	1
Selected costs	1 958 370	1 231 857	927 071	1 009 050	2	2	2	2
Materials, components, and supplies	1 156 969	742 767	598 051	644 548	2	2	2	2
Construction work subcontracted out to others	739 261	448 164	285 607	328 383	3	4	3	3
Selected power, fuels, and lubricants	62 140	40 925	43 412	36 119	2	2	3	2
Electricity	7 039	4 355	4 202	3 092	4	3	4	4
Natural gas	4 347	2 070	2 841	2 093	3	4	4	5
Gasoline and diesel fuel	47 012	31 929	33 029	26 662	2	2	3	2
On highway use	29 908	21 461	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use	17 104	10 468	(NA)	(NA)	4	3	(NA)	(NA)
Other, including lubricating oils and greases	3 743	2 569	3 339	4 272	5	6	6	5
Rental cost for machinery, equipment, and buildings	43 488	28 130	23 108	22 872	4	3	2	2
For machinery and equipment	31 016	17 954	17 840	19 393	4	3	2	2
For buildings	12 471	10 175	5 267	3 479	6	6	5	3
Selected purchased services	66 242	41 262	34 643	39 328	3	3	2	2
Communication services	17 167	8 841	8 003	6 812	9	4	4	3
Repairs to buildings and other structures	3 427	2 180	1 713	2 186	6	6	6	10
Repairs to machinery and equipment	45 648	30 240	24 926	30 329	3	3	3	2
Ownership of construction projects:								
Value of construction work	3 314 534	2 137 566	1 689 207	1 872 480	2	2	2	1
Government owned	838 072	615 133	443 410	426 906	4	4	5	2
Federal	169 917	217 675	(NA)	(NA)	4	8	(NA)	(NA)
State and local	668 155	397 458	(NA)	(NA)	5	5	(NA)	(NA)
Privately owned	2 476 463	1 522 432	1 245 797	1 445 574	2	3	3	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	534 092	375 545	3	3
Capital expenditures, other than land -----	67 544	39 534	5	4
New -----	48 424	25 898	6	4
Used -----	19 120	13 636	9	9
Retirements and disposition of depreciable assets -----	20 131	28 032	7	12
End-of-year gross book value of depreciable assets -----	581 505	387 047	3	3
Depreciation charges during year-----	59 430	40 060	3	4
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	70 860	69 252	5	10
Capital expenditures, other than land -----	8 555	4 902	18	13
New buildings and other structures -----	7 478	2 382	20	18
Used buildings and other structures -----	1 078	2 520	26	20
Retirements and disposition of depreciable assets -----	(S)	1 243	(S)	16
End-of-year gross book value of depreciable assets -----	78 164	72 911	6	9
Depreciation charges during year-----	5 753	4 252	7	9
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	463 232	306 293	3	3
Capital expenditures, other than land -----	58 989	34 631	5	5
New machinery and equipment, including automobiles and trucks -----	40 946	23 515	5	5
New automobiles and trucks, intended primarily for highway use -----	12 808	10 371	6	7
Used machinery and equipment, including automobiles and trucks -----	18 043	11 116	10	10
Retirements and disposition of depreciable assets -----	18 879	26 788	6	13
End-of-year gross book value of depreciable assets -----	503 341	314 136	3	3
Depreciation charges during year-----	53 677	35 807	3	4

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	4 324	1
Value of construction work	3 314 534	2
Establishments with inventories:		
Number	1 568	3
Value of construction work	1 744 329	2
Inventories ¹ :		
End of 1992, materials and supplies	52 155	10
End of 1991, materials and supplies	43 399	6
Establishments with no inventories:		
Number	1 598	4
Value of construction work	1 063 485	4
Establishments not reporting:		
Number	1 158	4
Value of construction work	506 721	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of —								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	4 324	2 582	992	481	199	52	17	1	—	—
All employees** -----	30 092	5 013	6 281	6 192	6 012	3 656	2 938	(D)	—	—
Payroll, all employees -----	650 066	71 911	107 194	130 562	150 674	97 767	91 958	(D)	—	—
Dollar value of business done -----	3 385 819	411 192	530 092	631 447	648 907	458 656	705 526	(D)	—	—
Value of construction work -----	3 314 534	405 601	522 949	603 046	640 285	448 375	694 279	(D)	—	—
Net value of construction work† -----	2 575 274	341 265	429 691	482 255	488 354	326 083	507 626	(D)	—	—
Value added†† -----	1 427 450	180 437	238 382	263 540	290 241	195 657	259 193	(D)	—	—
Cost of materials, components, supplies, and fuels -----	1 219 109	166 419	198 452	247 117	206 734	140 707	259 680	(D)	—	—
Cost of construction work subcontracted out to others -----	739 261	64 335	93 258	120 791	151 931	122 292	186 653	(D)	—	—
Rental cost for machinery, equipment, and buildings -----	43 488	3 831	5 949	6 930	10 152	7 299	9 325	(D)	—	—
Capital expenditures, other than land -----	67 544	11 219	10 246	13 422	14 550	12 590	5 518	(D)	—	—
End-of-year gross book value of depreciable assets -----	581 505	76 219	81 537	123 697	130 392	92 495	77 165	(D)	—	—
1987										
All employees** -----	26 566	4 483	5 066	5 472	5 519	3 178	2 846	(D)	(D)	—
Value of construction work -----	2 137 566	354 624	303 772	428 530	483 098	317 789	249 751	(D)	(D)	—
Value added†† -----	952 428	158 090	149 043	204 813	223 031	126 828	90 622	(D)	(D)	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	5	7	6	4	3	(Z)	(D)	—	—
Net value of construction work† -----	1	6	8	5	2	6	(Z)	(D)	—	—
Capital expenditures, other than land -----	5	19	15	13	6	9	(Z)	(D)	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	4 324	(S)	(S)	699	1 168	699	623	358	88	74	41
All employees** -----	30 092	(S)	(S)	1 244	3 503	3 979	5 185	5 535	2 860	3 355	3 807
Payroll, all employees -----	650 066	(S)	(S)	12 377	51 039	63 305	96 233	128 627	72 654	95 063	126 244
Dollar value of business done -----	3 385 819	(S)	(S)	52 483	192 602	239 306	424 039	536 842	301 193	503 722	1 120 485
Value of construction work -----	3 314 534	(S)	(S)	51 992	190 115	237 401	415 640	515 107	295 617	487 245	1 106 356
Net value of construction work† -----	2 575 274	(S)	(S)	48 984	176 733	212 438	353 739	436 649	230 559	367 854	734 222
Value added†† -----	1 427 450	(S)	(S)	29 029	108 182	120 858	191 484	260 354	134 677	200 828	373 874
Cost of materials, components, supplies, and fuels -----	1 219 109	(S)	(S)	20 447	71 040	93 484	170 654	198 031	101 458	183 503	374 477
Cost of construction work subcontracted out to others -----	739 261	(S)	(S)	(S)	13 381	24 963	61 901	78 458	65 058	119 391	372 134
Rental cost for machinery, equipment, and buildings -----	43 488	(S)	(S)	731	1 995	3 767	4 773	7 391	5 467	6 673	12 526
Capital expenditures, other than land -----	67 544	(S)	(S)	1 151	7 287	7 130	7 793	13 714	5 440	12 233	12 349
End-of-year gross book value of depreciable assets -----	581 505	(S)	(S)	11 242	44 593	49 220	75 626	116 511	55 100	96 020	130 200
1987											
All employees** -----	26 566	(S)	(S)	1 448	3 672	4 233	3 347	4 352	3 318	2 790	2 731
Value of construction work -----	2 137 566	(S)	(S)	49 654	172 661	205 652	239 677	428 587	314 133	358 986	351 526
Value added†† -----	952 428	(S)	(S)	29 426	92 992	113 019	116 918	193 881	151 606	138 761	105 963
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	12	8	9	7	5	4	2	3
Net value of construction work† -----	1	(S)	(S)	9	7	9	8	6	4	4	3
Capital expenditures, other than land -----	5	(S)	(S)	23	25	21	16	13	7	1	9

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	3 314 534	2 080 532	756 778	404 770	2	2	3	3
Building construction	2 123 734	1 255 922	588 159	279 653	2	3	4	4
Single-family houses	785 978	528 025	158 227	99 727	5	6	8	8
Single-family houses, detached	719 872	490 167	136 412	93 294	5	7	8	9
Single-family houses, attached, including townhouses and townhouse-type condominiums	66 106	37 858	21 815	6 433	13	12	31	21
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	72 979	46 107	10 344	16 529	9	12	14	14
Other residential buildings, including hotels, motels, and tourist cabins	29 525	16 243	8 062	5 220	18	26	32	11
Office buildings	188 901	86 640	72 769	29 491	4	6	6	5
Other commercial buildings such as stores, restaurants, and automobile service stations	272 893	159 026	78 636	35 231	4	4	10	10
Industrial buildings and warehouses	362 343	210 445	102 379	49 519	3	4	5	7
Industrial buildings	274 010	155 759	81 190	37 061	3	4	5	9
Warehouses	88 333	54 686	21 189	12 457	5	6	12	6
Religious buildings	31 718	12 033	13 898	5 787	7	13	6	11
Educational buildings	167 970	72 149	82 566	13 255	6	6	11	8
Hospitals and institutional buildings	105 528	53 138	41 456	10 934	4	7	4	5
Farm buildings, nonresidential	67 674	49 467	8 369	9 839	12	10	37	17
Amusement, social, and recreational buildings, indoors	16 509	11 231	3 545	1 733	17	19	29	26
Other nonresidential buildings	21 717	11 418	7 908	2 391	12	20	5	36
Nonbuilding construction	1 118 346	824 610	168 619	125 117	3	4	2	6
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	349 973	202 724	118 066	29 183	5	7	1	21
Airport runways and related work	12 997	5 365	6 670	*962	14	17	7	50
Private driveways and parking areas	15 677	10 725	1 958	2 993	14	17	7	24
Recreational facilities	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Bridges, tunnels, and elevated highways	48 218	39 969	4 465	3 785	23	27	2	37
Marine construction	(D)	(D)	837	814	(D)	(D)	30	32
Conservation and development construction	54 010	(D)	2 499	(D)	14	(D)	27	(D)
Power and communication transmission lines, towers, and related facilities	119 539	(D)	8 089	(D)	2	(D)	9	(D)
Sewers, water mains, and related facilities	149 830	119 031	15 396	15 402	10	11	17	13
Sewers, sewer lines, septic systems, and related facilities	53 532	40 582	9 188	3 762	15	17	28	18
Water mains and related facilities	96 298	78 450	6 208	11 641	9	11	7	15
Mass transit construction	(D)	(D)	*469	2 419	(D)	(D)	74	34
Blast furnaces, petroleum refineries, chemical complexes, etc.	(D)	(D)	(D)	1 799	(D)	(D)	(D)	(Z)
Power plants	(D)	(D)	4 159	6 406	(D)	(D)	32	15
Other nonbuilding construction	28 026	22 744	3 028	2 254	15	18	6	31
Construction work, n.s.k.	72 454	(NA)	(NA)	(NA)	11	(NA)	(NA)	(NA)
1987								
Value of construction work	2 137 566	1 290 530	472 254	274 328	2	2	3	4
Building construction	1 532 675	938 459	376 441	217 776	2	3	3	6
Single-family houses	499 461	321 059	87 022	91 379	6	8	7	12
Single-family houses, detached	458 959	292 274	82 164	84 519	6	8	7	13
Single-family houses, attached, including townhouses and townhouse-type condominiums	40 502	28 785	4 857	6 859	15	17	15	24
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	55 535	34 874	13 293	7 366	7	7	22	15
Other residential buildings, including hotels, motels, and tourist cabins	25 381	14 441	6 562	4 377	16	26	14	10
Office buildings	237 500	148 586	63 925	24 988	3	4	5	4
Other commercial buildings such as stores, restaurants, and automobile service stations	194 706	129 348	45 388	19 969	4	4	8	7
Industrial buildings and warehouses	248 000	147 546	64 878	35 575	5	7	5	7
Industrial buildings	179 852	104 709	51 250	23 892	4	6	5	6
Warehouses	68 148	42 837	13 627	11 683	10	14	9	13
Religious buildings	24 909	10 902	9 402	4 604	7	9	12	12
Educational buildings	68 469	26 758	31 971	9 738	5	3	9	20
Hospitals and institutional buildings	74 414	25 642	40 243	8 529	7	11	10	13
Farm buildings, nonresidential	71 473	57 303	6 354	7 814	16	19	13	21
Amusement, social, and recreational buildings, indoors	20 233	13 484	4 152	2 596	12	12	17	29
Other nonresidential buildings	12 594	8 516	3 251	841	25	28	23	32
Nonbuilding construction	502 360	352 071	95 814	54 475	3	3	5	8
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	174 672	95 506	59 242	19 923	6	8	5	18
Private driveways and parking areas	16 259	(D)	2 923	(D)	10	(D)	19	(D)
Recreational facilities	15 095	(D)	*4 709	(D)	16	(D)	46	(D)
Bridges, tunnels, and elevated highways	35 344	29 854	*1 227	4 262	8	8	48	9
Conservation and development construction	20 495	13 614	*4 644	2 237	24	33	44	32
Power and communication transmission lines, towers, and related facilities	66 632	60 681	2 934	3 016	3	3	23	3
Sewers, water mains, and related facilities	48 378	29 459	11 709	7 210	9	10	12	19
Sewers, sewer lines, septic systems, and related facilities	27 518	17 734	6 865	2 919	8	8	14	18
Water mains and related facilities	20 860	11 724	4 844	4 291	17	19	22	30
Other nonbuilding construction	125 485	102 337	8 435	14 728	5	5	18	15
Construction work, n.s.k.	102 529	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	4 324	23 444	20 357	24 421	25 933	23 065	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	691	1 926	1 724	1 980	2 210	1 791	6	8	9	8	9	8
1522	Other residential buildings -----	48	318	254	362	351	304	31	27	24	27	26	33
1531	Operative builders -----	112	279	292	334	251	241	18	18	14	24	18	15
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	80	776	606	807	825	867	21	11	12	9	12	11
1542	Nonresidential buildings, n.e.c. ---	311	2 068	2 025	2 045	2 149	2 053	10	6	6	7	6	6
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	69	1 888	1 025	2 172	2 362	1 993	14	6	7	6	6	6
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	6	50	48	51	44	55	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	95	926	747	987	1 084	888	19	11	12	11	11	12
1629	Heavy construction, n.e.c. -----	232	1 412	1 039	1 409	1 741	1 459	9	6	7	6	5	7
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	621	3 542	3 427	3 636	3 618	3 487	4	3	3	3	3	3
1721	Painting and paper hanging -----	194	773	682	803	831	776	8	9	12	8	9	10
1731	Electrical work -----	396	1 995	1 902	1 971	2 104	2 002	4	3	3	4	3	3
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	166	880	740	904	972	905	7	9	10	9	9	9
1742	Plastering, drywall, and insulation work -----	132	1 069	1 046	1 082	1 132	1 016	6	8	8	9	8	8
1743	Terrazzo, tile, marble, and mosaic work -----	21	79	81	72	85	79	30	25	29	24	23	25
175	Carpentry and floor work:												
1751	Carpentry -----	328	1 065	976	1 112	1 204	966	8	10	10	10	9	10
1752	Floor laying and other floor work --	66	211	205	221	227	189	15	12	14	12	12	13
1761	Roofing, siding, and sheet metal work -----	192	1 108	974	1 153	1 237	1 067	10	7	7	7	6	7
1771	Concrete work -----	178	1 091	823	1 294	1 294	952	11	11	14	12	12	11
1781	Water well drilling -----	100	399	401	414	427	352	6	9	9	9	8	9
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	30	225	202	215	272	212	36	28	26	29	26	23
1793	Glass and glazing work -----	23	96	84	83	111	106	(Z)	(Z)	(Z)	3	2	(Z)
1794	Excavation work -----	85	452	382	493	483	453	18	11	15	12	10	12
1795	Wrecking and demolition work -----	4	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	25	262	221	245	239	344	10	9	9	9	11	7
1799	Special trade contractors, n.e.c. ---	119	(D)	(D)	(D)	(D)	(D)	17	(D)	(D)	(D)	(D)	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	7.0	21.6	141.4	.196	.368	.223	.252	.013
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.6	15.6	123.4	.164	.418	.235	(S)	.008
1522	Other residential buildings -----	8.2	17.2	105.8	.202	.209	.305	(S)	*.007
1531	Operative builders -----	4.9	27.1	839.0	.063	.361	.357	.023	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	12.6	27.4	225.5	.158	.361	.325	.050	.004
1542	Nonresidential buildings, n.e.c. -----	8.9	20.2	193.0	.141	.254	.517	.029	.009
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	32.7	26.1	167.6	.184	.392	.221	.201	.022
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	10.5	32.6	293.2	.140	.277	.216	.113	.007
1623	Water, sewer, and utility lines -----	12.4	25.4	201.1	.161	.569	.151	.174	.030
1629	Heavy construction, n.e.c. -----	8.0	26.8	323.1	.108	.278	.278	.033	.016
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	7.8	23.7	112.2	.288	.431	.090	.502	.012
1721	Painting and paper hanging -----	4.7	17.2	58.9	.343	.238	.056	.430	.021
1731	Electrical work -----	6.5	24.0	98.6	.316	.453	.026	.576	.009
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.9	17.0	56.5	.333	.299	*.154	.648	.010
1742	Plastering, drywall, and insulation work -----	9.4	20.9	79.9	.306	.318	.105	(S)	.017
1743	Terrazzo, tile, marble, and mosaic work -----	5.3	20.2	105.4	.265	.487	*.015	(S)	.021
175	Carpentry and floor work:								
1751	Carpentry -----	4.0	16.8	79.2	.264	.364	.136	.479	.008
1752	Floor laying and other floor work -----	4.0	16.4	149.6	.136	.433	.147	.769	.006
1761	Roofing, siding, and sheet metal work -----	7.5	17.7	88.9	.260	.437	.094	.379	.011
1771	Concrete work -----	6.9	18.2	82.0	.251	.422	.066	.496	.015
1781	Water well drilling -----	5.4	22.1	120.9	.247	.469	.016	.028	.006
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	9.6	19.1	51.7	.474	(D)	(D)	.744	.026
1793	Glass and glazing work -----	6.7	19.1	101.8	.299	.556	.010	.741	.022
1794	Excavation work -----	6.4	24.2	93.3	.309	.238	.062	.626	.039
1795	Wrecking and demolition work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	16.5	20.7	86.3	.376	.268	.016	.504	.012
1799	Special trade contractors, n.e.c. -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	OMAHA, NE-IA MSA											
15,16,17	Construction industries	1 793	14 711	354 345	1 933 644	1 465 442	809 972	683 552	468 202	29 574	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	877	15 245	87 468	(D)	33 086	33 441	(D)	1 121	10	(D)
1522	Other residential buildings	(S)	(S)	2 979	15 572	8 611	6 787	1 825	6 961	371	(S)	22
1531	Operative builders	68	368	10 985	184 465	116 770	50 713	68 489	67 694	812	15	10
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	37	501	17 606	127 666	81 492	39 920	42 338	46 175	1 426	10	4
1542	Nonresidential buildings, n.e.c.	107	1 051	23 730	182 799	80 154	35 103	47 911	102 645	1 752	9	8
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	38	1 146	31 217	176 821	140 376	72 430	68 151	36 444	5 237	10	14
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	52	745	22 116	140 374	115 553	30 053	86 563	24 821	1 705	11	7
1629	Heavy construction, n.e.c.	50	602	20 963	(D)	(D)	(D)	(D)	(D)	3 290	7	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	246	2 263	60 536	209 697	189 238	105 263	85 395	20 459	4 516	4	2
1721	Painting and paper hanging	124	718	12 540	34 215	32 152	24 074	8 113	2 063	*1 722	10	9
1731	Electrical work	136	1 232	32 837	96 211	94 154	56 863	38 604	2 056	1 099	4	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	84	630	11 227	34 760	27 597	20 396	10 532	*7 163	696	12	8
1742	Plastering, drywall, and insulation work	(S)	660	14 992	51 619	45 671	29 978	16 706	5 948	(S)	11	7
1743	Terrazzo, tile, marble, and mosaic work	14	56	(D)	4 156	4 156	2 850	1 397	—	56	10	9
175	Carpentry and floor work:											
1751	Carpentry	158	804	14 858	46 611	41 184	26 070	19 505	5 427	505	13	13
1752	Floor laying and other floor work ...	36	202	3 172	21 816	18 800	8 963	*9 890	*3 017	(S)	16	33
1761	Roofing, siding, and sheet metal work	48	674	13 093	48 667	43 877	23 214	20 811	4 790	191	9	4
1771	Concrete work	78	491	9 372	32 792	29 508	15 923	13 591	3 284	403	20	13
1781	Water well drilling	8	(D)	2 877	8 686	(D)	4 894	3 601	(D)	155	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	*18	186	4 828	9 735	(D)	(D)	(S)	(D)	(D)	23	(D)
1793	Glass and glazing work	(S)	108	1 991	7 906	7 813	4 206	3 911	93	161	2	3
1794	Excavation work	50	332	8 268	26 372	25 178	20 543	4 927	1 194	2 495	17	17
1795	Wrecking and demolition work	5	104	2 292	6 369	(D)	4 519	1 507	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c. ...	9	261	6 105	15 859	15 616	11 826	3 868	243	(D)	(Z)	(Z)
1799	Special trade contractors, n.e.c.	72	471	8 298	(D)	(D)	16 090	(D)	(D)	528	15	(D)

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

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-- Not applicable for this report.

Summary of Findings

This report provides results from the 1992 Census of Construction Industries for North Dakota. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 5,021 establishments in this State operating in the construction industries. These establishments accounted for \$1.2 billion in total dollar value of business done.

Most of the 5,021 construction establishments were small. Of the total, 3,344 were nonemployers, and over half of the employer establishments had less than 5 employees. The 563 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 80 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$1.2 billion in total dollar value of business done. Of this amount, \$1.1 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$227 million, leaving net value of construction work of \$917 million. In addition, these establishments paid out \$457 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$534 million. (See Introduction and appendixes for explanation of terms.)

There were 1,677 establishments with total employment averaging 11,799 during the year. Total payroll for 1992 was \$252 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 3,344 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$71.1 million. Most of these establishments, about 84 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

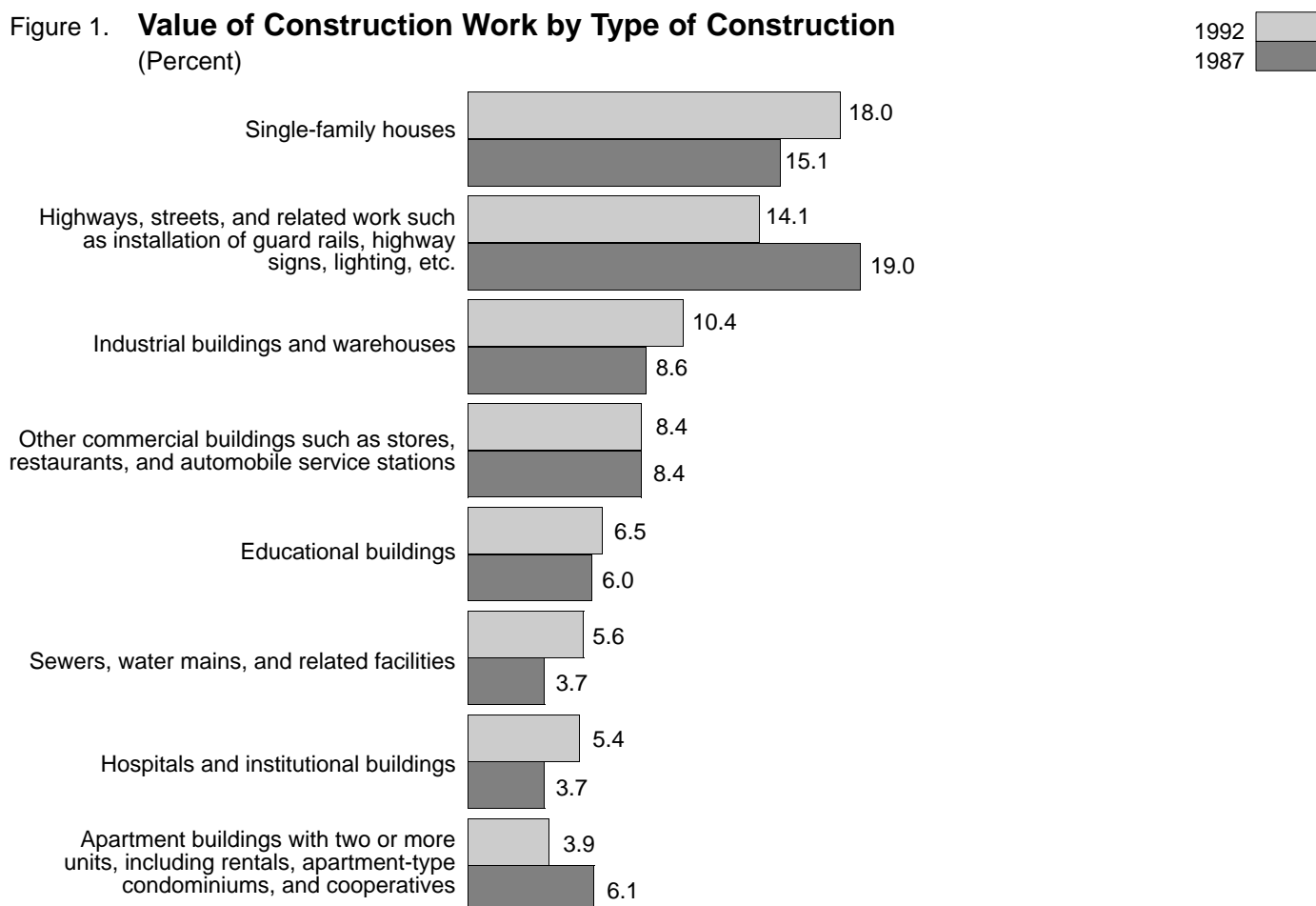


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

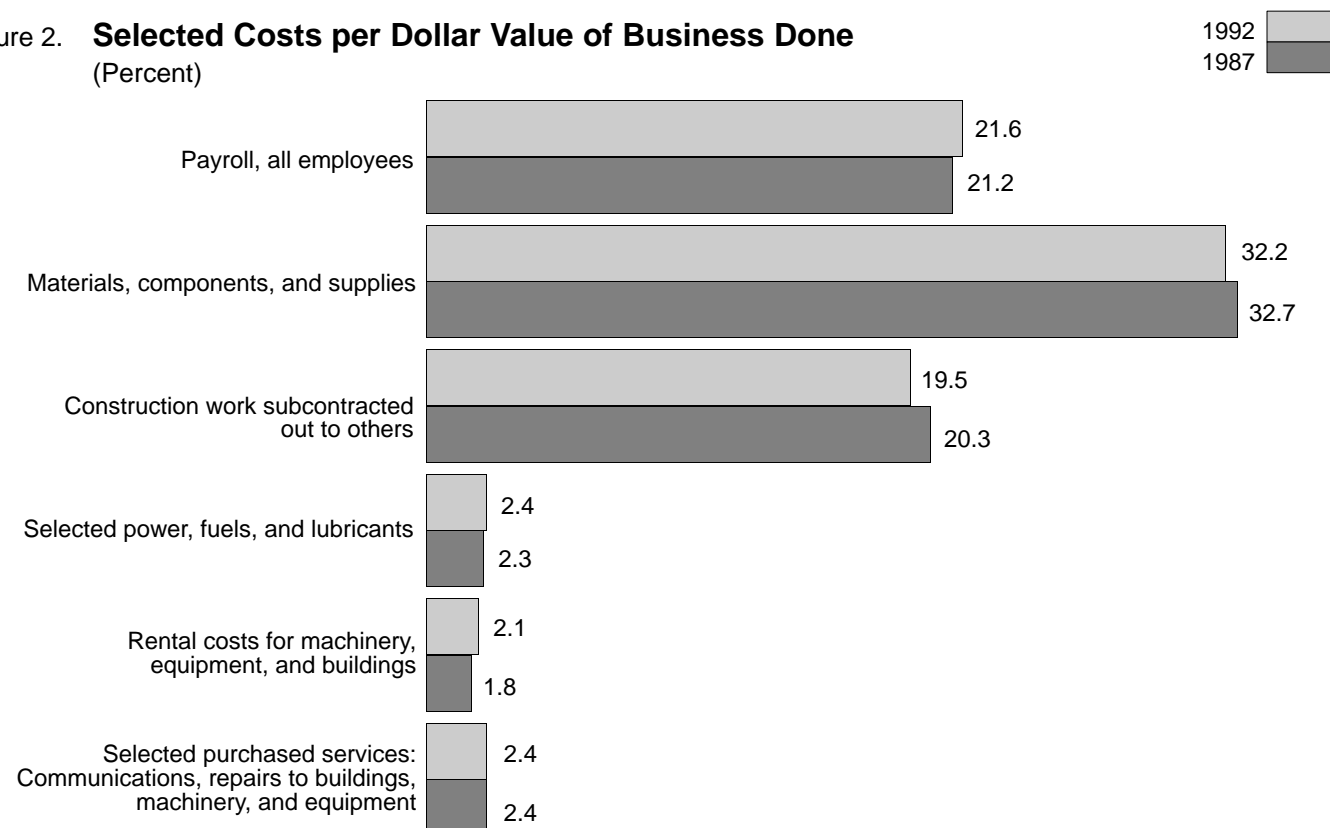


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done ¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	5 021	4 384	11 799	1 237 087	3 344	3 366	71 119	1 677	1 018	11 799	1 165 968	2	2
15	Building construction—General contractors and operative builders ----	878	720	2 866	366 487	441	444	18 702	437	276	2 866	347 785	5	4
16	Heavy construction other than building construction— contractors-----	268	154	2 923	355 343	92	94	2 193	176	60	2 923	353 150	3	3
17	Special trade contractors -----	3 875	3 511	6 009	515 256	2 811	2 828	50 224	1 064	683	6 009	465 032	3	3
1711	Plumbing, heating, and air-conditioning --	443	319	1 378	142 010	222	217	7 775	221	102	1 378	134 235	5	5
1731	Electrical work-----	398	287	1 077	94 010	195	191	6 441	203	96	1 077	87 569	6	7
	1987													
15, 16, 17	Construction industries ² -----	6 216	5 141	11 066	1 077 450	4 408	4 413	140 847	1 808	728	11 066	936 603	2	3
15	Building construction—General contractors and operative builders ----	1 263	943	(D)	353 698	820	795	43 556	443	148	(D)	310 142	(D)	7
16	Heavy construction other than building construction— contractors-----	307	156	2 852	302 130	105	107	12 851	202	49	2 852	289 279	5	3
17	Special trade contractors -----	4 557	3 956	(D)	410 393	3 403	3 428	73 218	1 154	528	(D)	337 175	(D)	4
1711	Plumbing, heating, and air-conditioning --	503	346	1 234	105 463	270	274	11 086	233	72	1 234	94 377	6	7
1731	Electrical work-----	485	338	980	65 973	267	266	9 103	218	72	980	56 870	9	9

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹	1 677	11 799	9 734	251 581	195 768	1 144 246	917 069	534 253
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses	233	979	797	14 245	11 078	87 443	67 207	35 188
1522	Other residential buildings	*19	221	171	4 134	2 366	21 886	14 802	8 042
1531	Operative builders	19	68	45	1 893	1 091	18 137	11 815	6 327
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses	37	357	285	8 240	5 736	38 340	29 137	16 808
1542	Nonresidential buildings, n.e.c.	129	1 240	1 018	25 093	17 569	178 570	96 653	44 130
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction	43	1 154	1 022	30 651	26 297	153 581	123 121	82 621
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction	4	182	157	5 326	4 263	24 934	19 442	10 798
1623	Water, sewer, and utility lines	49	576	487	15 110	11 750	69 060	58 256	32 419
1629	Heavy construction, n.e.c.	80	1 012	879	25 436	21 568	(D)	84 356	58 595
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning	221	1 378	1 087	34 695	26 899	128 338	111 502	61 801
1721	Painting and paper hanging	72	367	319	6 681	5 717	20 586	19 841	13 896
1731	Electrical work	203	1 077	837	23 568	19 190	86 897	83 400	46 009
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework	60	259	242	4 322	4 045	(D)	13 675	(D)
1742	Plastering, drywall, and insulation work	23	179	147	4 086	2 546	13 198	12 254	6 804
1743	Terrazzo, tile, marble, and mosaic work	4	(D)	13	(D)	(D)	1 061	(D)	571
175	Carpentry and floor work:								
1751	Carpentry	108	327	276	4 876	4 133	29 127	24 389	12 430
1752	Floor laying and other floor work	35	127	96	1 925	1 350	*8 630	*8 183	3 318
1761	Roofing, siding, and sheet metal work	77	748	621	13 545	9 537	53 014	50 076	28 049
1771	Concrete work	93	(D)	364	(D)	(D)	29 353	26 276	12 586
1781	Water well drilling	29	88	63	1 828	1 159	7 186	7 053	3 814
179	Miscellaneous special trade contractors:								
1791	Structural steel erection	*5	67	42	1 614	906	6 121	(D)	*4 443
1793	Glass and glazing work	6	52	33	(D)	562	3 411	(D)	(D)
1794	Excavation work	34	118	96	1 983	1 392	8 455	8 304	6 685
1795	Wrecking and demolition work	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c.	14	197	156	2 229	1 599	7 653	7 124	4 685
1799	Special trade contractors, n.e.c.	79	606	480	12 677	9 327	34 523	(D)	24 617

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
404 539	227 176	230 155	24 260	28 548	264 841	11 066	901 567	412 270	2	2	7	15, 16, 17
												15
33 393 6 776	20 236 7 083	3 162 *389	(S) *185	1 271 256	8 244 2 174	678 307	45 585 52 419	18 017 17 193	15 22	14 18	37 35	152 1521 1522
5 872	6 322	(S)	*119	380	1 189	(D)	42 617	14 490	20	12	9	1531
12 329 54 158	9 203 81 917	2 044 *3 538	*586 1 020	561 2 091	4 319 19 489	366 1 045	32 143 121 942	10 027 33 644	17 6	15 5	15 22	154 1541 1542
												16
43 389	30 460	21 293	7 212	6 659	82 243	1 604	176 959	92 859	5	4	7	1611
8 644 26 610 (D)	5 492 10 804 (D)	(D) 11 125 (D)	(D) 3 123 4 015	499 3 028 4 901	6 957 29 004 31 816	218 397 633	21 090 29 751 53 911	9 765 17 308 27 152	(Z) 10 8	(Z) 12 10	(Z) 25 32	162 1622 1623 1629
												17
55 598	16 836	47 811	1 227	1 523	13 330	1 234	91 319	41 861	5	4	20	1711
6 415	745	11 816	512	663	3 892	410	15 108	10 720	15	19	18	1721
38 063	3 497	17 245	1 360	1 948	19 794	980	56 340	30 485	6	7	36	1731
5 670 5 740 (D)	(D) *944 (D)	10 974 *11 477 1 018	*87 *222 (D)	(D) *459 (D)	1 476 *1 806 (D)	268 359 7	12 338 16 209 510	6 882 11 379 233	17 14 (D)	13 17 (D)	(D) 52 (D)	174 1741 1742 1743
12 410 *4 872	*4 738 *447	7 470 *9 637	262 38	500 151	2 984 *1 419	387 *133	19 577 7 706	9 589 *3 125	14 34	19 43	25 39	175 1751 1752
22 340	2 938	17 809	627	658	7 443	492	34 766	17 227	7	5	8	1761
14 154	3 078	14 909	(S)	1 039	(D)	272	11 407	6 402	(D)	12	31	1771
3 418	133	264	69	*149	3 786	44	4 254	2 480	8	9	55	1781
(D) 2 153 1 983 — 2 440 (D)	(D) (D) (S) — 529 (D)	2 648 2 406 *1 204 — 1 588 24 805	*193 119 *107 — 62 (D)	*83 (D) *336 — 15 1 128	*440 296 *1 983 — 1 668 10 870	252 56 306 (D) 118 250	13 557 4 419 12 492 798 10 974 13 371	7 968 2 154 8 591 550 6 825 5 336	38 3 23 — 10 13	(D) (D) 29 — 29 (D)	57 (D) 60 — (Z) 37	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	1 677	1 808	1 969	2 124	1	2	4	5
Proprietors and working partners	1 018	728	959	1 457	4	7	7	8
All employees**	11 799	11 066	12 950	15 438	2	2	2	3
Construction workers:								
March	7 071	6 276	7 874	9 032	2	3	3	3
May	10 214	9 474	10 554	13 838	2	3	3	3
August	11 891	10 800	13 134	16 763	2	2	3	4
November	9 760	8 715	11 256	13 840	2	2	3	4
Average	9 734	8 816	10 942	13 379	2	2	3	3
Other employees:								
March	1 987	2 210	2 002	1 910	3	4	4	4
May	2 055	2 282	(NA)	(NA)	3	4	(NA)	(NA)
August	2 102	2 258	(NA)	(NA)	3	4	(NA)	(NA)
November	2 116	2 249	(NA)	(NA)	3	4	(NA)	(NA)
Average	2 065	2 250	(NA)	(NA)	3	4	(NA)	(NA)
Payroll, all employees	251 581	198 974	214 100	176 758	1	2	2	2
Payroll, construction workers	195 768	150 312	173 627	145 566	2	2	3	2
Payroll, other employees	55 812	48 661	40 472	31 191	2	3	2	3
First quarter payroll, all employees	43 873	35 491	42 710	28 624	3	3	3	2
Fringe benefits, all employees	52 379	39 380	36 187	25 286	2	2	3	3
Legally required expenditures	37 584	28 463	28 774	17 778	2	2	3	3
Voluntary expenditures	14 794	10 916	7 412	7 508	4	4	4	2
Dollar value of business done	1 165 968	936 603	945 486	744 582	2	3	2	2
Value of construction work	1 144 246	901 567	924 697	718 375	2	3	2	2
Value of construction work subcontracted in from others	230 155	136 102	180 975	107 924	6	6	6	4
Other business receipts	21 723	29 007	16 868	26 207	17	15	8	4
Net value of construction†	917 069	711 502	770 385	599 072	2	2	2	2
Value added††	534 253	412 270	430 697	342 021	2	3	2	2
Selected costs	631 715	518 304	510 869	393 674	2	3	2	2
Materials, components, and supplies	376 014	306 709	326 952	255 922	3	3	3	3
Construction work subcontracted out to others	227 176	190 065	154 311	119 303	3	6	2	2
Selected power, fuels, and lubricants	28 525	21 529	29 604	18 450	3	2	3	2
Electricity	2 774	1 960	2 400	1 755	9	8	7	4
Natural gas	1 964	1 444	1 389	587	4	6	7	10
Gasoline and diesel fuel	21 796	16 721	23 732	13 649	3	3	4	3
On highway use	12 570	10 873	(NA)	(NA)	3	3	(NA)	(NA)
Off highway use	9 227	5 847	(NA)	(NA)	4	4	(NA)	(NA)
Other, including lubricating oils and greases	1 990	1 403	2 082	2 458	5	5	4	5
Rental cost for machinery, equipment, and buildings	24 260	16 467	13 823	10 524	6	4	4	3
For machinery and equipment	18 209	11 971	10 378	8 692	7	5	4	3
For buildings	6 051	4 496	3 444	1 833	9	8	6	7
Selected purchased services	28 048	22 840	22 961	22 236	6	4	3	3
Communication services	5 239	3 884	4 404	2 970	7	4	5	8
Repairs to buildings and other structures	1 547	805	860	940	16	12	9	17
Repairs to machinery and equipment	21 262	18 149	17 696	18 327	7	4	3	2
Ownership of construction projects:								
Value of construction work	1 144 246	901 567	924 697	718 375	2	3	2	2
Government owned	473 539	406 817	281 235	173 111	5	4	5	1
Federal	157 864	144 688	(NA)	(NA)	5	8	(NA)	(NA)
State and local	315 675	262 128	(NA)	(NA)	6	5	(NA)	(NA)
Privately owned	670 707	494 750	643 461	545 264	4	4	3	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	245 473	229 432	5	5
Capital expenditures, other than land -----	28 548	22 244	7	6
New -----	19 736	12 418	7	8
Used -----	8 812	9 826	13	10
Retirements and disposition of depreciable assets -----	9 180	9 747	10	24
End-of-year gross book value of depreciable assets -----	264 841	241 928	5	5
Depreciation charges during year-----	22 628	25 472	5	5
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	35 298	35 080	13	16
Capital expenditures, other than land -----	2 028	3 199	14	17
New buildings and other structures -----	1 709	1 646	17	14
Used buildings and other structures -----	319	1 552	22	33
Retirements and disposition of depreciable assets -----	197	*504	17	42
End-of-year gross book value of depreciable assets -----	37 129	37 775	13	15
Depreciation charges during year-----	2 136	2 069	11	12
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	210 174	194 351	5	5
Capital expenditures, other than land -----	26 520	19 045	7	7
New machinery and equipment, including automobiles and trucks -----	18 027	10 771	6	9
New automobiles and trucks, intended primarily for highway use -----	5 712	3 239	14	13
Used machinery and equipment, including automobiles and trucks -----	8 493	8 273	13	10
Retirements and disposition of depreciable assets -----	8 983	9 243	10	24
End-of-year gross book value of depreciable assets -----	227 712	204 153	5	5
Depreciation charges during year-----	20 492	23 402	5	6

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	1 677	1
Value of construction work	1 144 246	2
Establishments with inventories:		
Number	676	5
Value of construction work	747 343	2
Inventories ¹ :		
End of 1992, materials and supplies	22 322	8
End of 1991, materials and supplies	19 800	9
Establishments with no inventories:		
Number	540	6
Value of construction work	277 505	5
Establishments not reporting:		
Number	461	6
Value of construction work	119 397	7

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	1 677	1 113	287	158	88	22	6	2	—	—
All employees** -----	11 799	2 069	1 849	2 097	2 722	1 570	1 493	(D)	—	—
Payroll, all employees -----	251 581	31 228	31 496	44 002	67 438	36 242	41 174	(D)	—	—
Dollar value of business done -----	1 165 968	178 984	127 572	199 484	296 104	183 603	180 221	(D)	—	—
Value of construction work -----	1 144 246	173 192	125 557	192 090	290 767	182 473	180 166	(D)	—	—
Net value of construction work† -----	917 069	155 435	109 316	157 999	231 047	123 674	139 598	(D)	—	—
Value added†† -----	534 253	89 328	69 675	86 749	122 372	63 358	102 771	(D)	—	—
Cost of materials, components, supplies, and fuels -----	404 539	71 899	41 656	78 644	114 012	61 446	36 882	(D)	—	—
Cost of construction work subcontracted out to others -----	227 176	17 757	16 241	34 091	59 720	58 799	40 568	(D)	—	—
Rental cost for machinery, equipment, and buildings -----	24 260	2 165	2 072	5 329	3 491	3 014	8 189	(D)	—	—
Capital expenditures, other than land -----	28 548	5 001	3 235	2 944	5 833	5 312	6 223	(D)	—	—
End-of-year gross book value of depreciable assets -----	264 841	41 306	29 258	38 168	60 606	36 252	59 250	(D)	—	—
1987										
All employees** -----	11 066	2 138	2 273	2 109	2 202	1 023	1 320	(D)	—	—
Value of construction work -----	901 567	136 738	156 296	370 757	(D)	237 775	(D)	(D)	—	—
Value added†† -----	412 270	67 868	77 795	77 374	84 241	44 315	60 676	(D)	—	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	2	8	11	10	4	(Z)	(Z)	(D)	—	—
Net value of construction work† -----	2	9	11	11	4	(Z)	(Z)	(D)	—	—
Capital expenditures, other than land -----	7	23	22	13	9	(Z)	(Z)	(D)	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	1 677	(S)	(S)	245	528	260	140	146	62	20	17
All employees** -----	11 799	(S)	(S)	395	1 448	1 481	990	2 317	1 820	1 181	1 949
Payroll, all employees -----	251 581	(S)	(S)	3 953	20 877	23 928	20 568	51 471	43 742	30 722	54 781
Dollar value of business done -----	1 165 968	(S)	(S)	17 178	86 888	90 135	99 788	214 269	210 944	145 492	295 445
Value of construction work -----	1 144 246	(S)	(S)	16 895	84 247	88 845	96 801	205 082	208 187	143 885	294 581
Net value of construction work† -----	917 069	(S)	(S)	16 149	78 803	83 074	87 288	172 335	172 763	102 315	199 140
Value added†† -----	534 253	(S)	(S)	9 351	48 728	49 889	55 739	99 452	87 703	52 532	128 125
Cost of materials, components, supplies, and fuels -----	404 539	(S)	(S)	7 081	32 717	34 476	34 536	82 070	87 817	51 390	71 879
Cost of construction work subcontracted out to others -----	227 176	(S)	(S)	(S)	5 443	5 771	9 513	32 747	35 424	41 570	95 441
Rental cost for machinery, equipment, and buildings -----	24 260	(S)	(S)	*298	1 044	2 107	836	4 404	4 007	1 735	9 792
Capital expenditures, other than land -----	28 548	(S)	(S)	(S)	2 677	3 120	1 740	4 601	3 837	4 237	7 690
End-of-year gross book value of depreciable assets -----	264 841	(S)	(S)	(S)	20 263	30 254	17 980	54 051	35 518	27 968	73 761
1987											
All employees** -----	11 066	(S)	(S)	535	1 375	1 519	1 440	2 256	1 366	537	1 446
Value of construction work -----	901 567	(S)	(S)	21 197	62 723	88 184	101 153	214 763	130 936	267 832	(D)
Value added†† -----	412 270	(S)	(S)	11 262	32 884	55 281	47 719	97 958	82 676	(D)	76 112
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	(S)	(S)	16	11	13	15	8	4	(Z)	(Z)
Net value of construction work† -----	2	(S)	(S)	14	10	13	14	9	6	(Z)	(Z)
Capital expenditures, other than land -----	7	(S)	(S)	(S)	25	32	32	13	3	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

ND-10 NORTH DAKOTA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 144 246	668 119	270 554	165 978	2	3	3	4
Building construction	709 939	430 276	183 815	95 848	2	3	4	6
Single-family houses	205 481	144 039	35 830	25 613	7	8	9	10
Single-family houses, detached	185 129	131 754	31 924	21 450	7	9	10	12
Single-family houses, attached, including townhouses and townhouse-type condominiums	20 352	12 284	3 906	4 162	14	19	20	16
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	44 348	24 524	15 499	4 325	8	12	12	6
Other residential buildings, including hotels, motels, and tourist cabins	15 061	8 823	3 280	2 958	16	22	36	15
Office buildings	32 872	16 557	10 088	6 227	6	9	10	10
Other commercial buildings such as stores, restaurants, and automobile service stations	96 285	58 154	24 797	13 334	5	6	9	16
Industrial buildings and warehouses	118 758	66 644	30 290	21 825	5	5	11	9
Industrial buildings	82 083	43 489	25 359	13 235	5	5	12	5
Warehouses	36 675	23 155	4 931	8 590	11	12	22	20
Religious buildings	9 605	3 236	5 002	1 366	13	12	23	17
Educational buildings	74 318	45 961	23 036	5 321	6	6	13	12
Hospitals and institutional buildings	61 591	27 745	26 192	7 655	5	7	9	10
Farm buildings, nonresidential	27 271	19 526	4 006	3 739	13	15	25	20
Amusement, social, and recreational buildings, indoors	9 158	6 515	1 945	(S)	10	12	22	(S)
Other nonresidential buildings	15 190	8 553	3 850	(S)	15	18	21	(S)
Nonbuilding construction	394 712	237 842	86 739	70 131	3	4	6	5
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	161 189	75 763	43 135	42 291	3	2	8	6
Fencing	7 434	(D)	(D)	(D)	28	(D)	(D)	(D)
Conservation and development construction	10 756	7 107	(D)	(D)	7	7	(D)	(D)
Power and communication transmission lines, towers, and related facilities	14 574	(D)	(D)	(D)	18	(D)	(D)	(D)
Sewers, water mains, and related facilities	64 438	48 944	9 667	5 827	17	20	29	30
Sewers, sewer lines, septic systems, and related facilities	18 478	10 301	5 291	*2 886	26	36	29	40
Water mains and related facilities	45 961	38 643	4 376	2 941	21	23	31	29
Blast furnaces, petroleum refineries, chemical complexes, etc.	20 322	(D)	(D)	5 479	7	(D)	(D)	15
Power plants	21 263	(D)	(D)	10 080	2	(D)	(D)	4
Sewage treatment and water treatment plants	41 420	37 139	(D)	(D)	7	5	(D)	(D)
Sewage treatment plants	29 670	26 214	(D)	(D)	8	6	(D)	(D)
Water treatment plants	11 750	10 925	825	—	12	13	10	—
Oilfields	6 567	3 222	*2 665	*680	30	38	55	51
Other nonbuilding construction	46 749	34 424	8 113	4 213	4	4	2	11
Construction work, n.s.k.	39 594	(NA)	(NA)	(NA)	10	(NA)	(NA)	(NA)
1987								
Value of construction work	901 567	489 670	245 486	131 555	3	4	3	6
Building construction	532 620	297 926	157 709	75 730	4	6	4	12
Single-family houses	136 231	87 636	32 935	15 659	11	16	13	12
Single-family houses, detached	116 226	71 772	30 802	13 651	11	16	13	12
Single-family houses, attached, including townhouses and townhouse-type condominiums	20 004	15 863	2 133	2 008	20	25	25	31
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	55 442	43 528	8 173	3 740	19	24	12	34
Other residential buildings, including hotels, motels, and tourist cabins	20 407	4 400	4 028	*11 977	31	22	3	52
Office buildings	32 253	15 100	9 844	7 309	9	13	15	15
Other commercial buildings such as stores, restaurants, and automobile service stations	75 487	44 827	22 091	8 569	6	8	8	17
Industrial buildings and warehouses	77 362	42 486	24 193	10 682	6	8	7	15
Industrial buildings	50 894	27 860	15 244	7 789	9	12	11	19
Warehouses	26 468	14 625	8 949	2 893	5	7	3	14
Religious buildings	8 909	3 545	4 291	1 072	12	22	14	20
Educational buildings	53 989	28 013	21 301	4 674	8	10	14	26
Hospitals and institutional buildings	33 674	9 293	19 744	4 637	8	14	7	26
Farm buildings, nonresidential	18 524	11 586	3 423	3 514	15	16	23	21
Other nonresidential buildings	20 342	8 642	7 811	3 897	18	12	32	38
Nonbuilding construction	334 091	190 614	87 652	55 825	3	4	5	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	171 694	94 829	46 814	30 051	3	3	5	5
Power and communication transmission lines, towers, and related facilities	17 414	11 700	4 728	985	16	20	21	24
Sewers, water mains, and related facilities	33 661	23 970	5 169	4 521	10	6	19	32
Sewers, sewer lines, septic systems, and related facilities	12 066	6 858	2 657	2 550	16	11	21	38
Water mains and related facilities	21 594	17 111	2 511	1 970	8	5	27	33
Sewage treatment and water treatment plants	21 927	19 086	2 791	*49	11	11	28	57
Other nonbuilding construction	89 395	41 029	28 150	20 219	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	34 855	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	1 677	9 734	7 071	10 214	11 891	9 760	1	2	2	2	2	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	233	797	618	830	915	826	10	14	15	13	14	16
1522	Other residential buildings -----	*19	171	143	202	172	165	43	21	20	24	22	18
1531	Operative builders -----	19	45	43	44	52	39	13	27	30	28	23	23
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	37	285	212	239	314	375	34	16	22	17	19	13
1542	Nonresidential buildings, n.e.c. ---	129	1 018	871	1 094	1 154	953	14	6	5	5	6	6
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	43	1 022	436	1 255	1 564	832	19	5	9	4	4	6
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	4	157	52	205	222	147	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	49	487	262	508	717	462	23	10	12	12	9	10
1629	Heavy construction, n.e.c. -----	80	879	504	1 021	998	991	19	8	9	7	8	8
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	221	1 087	960	1 083	1 203	1 104	5	6	6	6	6	6
1721	Painting and paper hanging -----	72	319	221	309	426	321	13	14	17	17	13	15
1731	Electrical work -----	203	837	732	819	938	858	2	6	7	6	6	6
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	60	242	148	229	372	217	12	18	11	17	26	11
1742	Plastering, drywall, and insulation work -----	23	147	115	148	158	168	39	12	11	17	17	15
1743	Terrazzo, tile, marble, and mosaic work -----	4	13	(D)	14	(D)	13	(Z)	(Z)	(D)	(Z)	(D)	(Z)
175	Carpentry and floor work:												
1751	Carpentry -----	108	276	224	267	335	279	6	15	16	14	14	16
1752	Floor laying and other floor work --	35	96	92	93	97	101	20	35	35	39	33	33
1761	Roofing, siding, and sheet metal work -----	77	621	558	610	713	605	19	8	8	8	8	8
1771	Concrete work -----	93	364	216	398	475	369	11	11	12	11	11	14
1781	Water well drilling -----	29	63	45	71	75	60	(Z)	8	14	5	9	7
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	*5	42	25	33	62	*46	45	39	31	31	39	41
1793	Glass and glazing work -----	6	33	28	37	43	26	13	5	(Z)	(Z)	12	(Z)
1794	Excavation work -----	34	96	66	103	117	99	32	24	25	24	23	24
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	14	156	108	138	173	206	15	11	16	12	10	8
1799	Special trade contractors, n.e.c. ---	79	480	(D)	463	(D)	496	18	12	(D)	13	(D)	13

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	7.0	21.3	117.6	.220	.354	.199	.201	.021
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.2	14.6	109.7	.163	.382	.231	.036	(S)
1522	Other residential buildings -----	11.9	18.7	128.0	.189	.310	.324	.018	*.008
1531	Operative builders -----	3.6	27.8	403.0	.104	.324	.349	(S)	*.007
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	9.5	23.1	134.5	.215	.322	.240	.053	.015
1542	Nonresidential buildings, n.e.c. -----	9.6	20.2	175.4	.141	.303	.459	*.020	.006
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	27.0	26.6	150.3	.200	.283	.198	.139	.047
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	45.5	29.3	158.8	.214	.347	.220	(D)	(D)
1623	Water, sewer, and utility lines -----	11.7	26.2	141.8	.219	.385	.156	.161	.045
1629	Heavy construction, n.e.c. -----	12.7	25.1	(D)	(D)	(D)	(D)	(D)	(D)
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	6.2	25.2	118.1	.270	.433	.131	.373	.010
1721	Painting and paper hanging -----	5.1	18.2	64.5	.325	.312	.036	.574	.025
1731	Electrical work -----	5.3	21.9	103.8	.271	.438	.040	.198	.016
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	4.3	16.7	(D)	(D)	(D)	(D)	(D)	(D)
1742	Plastering, drywall, and insulation work -----	7.9	22.8	89.8	.310	.435	*.072	.870	*.017
1743	Terrazzo, tile, marble, and mosaic work -----	(D)	(D)	81.6	(D)	(D)	(D)	.959	(D)
175	Carpentry and floor work:								
1751	Carpentry -----	3.0	14.9	105.5	.167	.426	.163	.256	.009
1752	Floor laying and other floor work -----	3.6	15.2	89.9	.223	.565	.052	(S)	.004
1761	Roofing, siding, and sheet metal work -----	9.7	18.1	85.4	.256	.421	.055	.336	*.012
1771	Concrete work -----	(D)	(D)	80.6	(D)	.482	.105	.508	(S)
1781	Water well drilling -----	3.0	20.8	114.1	.254	.476	.019	.037	.010
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	12.2	24.1	145.7	.264	(D)	(D)	*.433	.032
1793	Glass and glazing work -----	8.0	(D)	103.4	(D)	.631	(D)	.705	.035
1794	Excavation work -----	3.5	16.8	88.1	.235	.235	*.018	*.142	*.013
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	13.7	11.3	49.1	.291	.319	.069	.208	.008
1799	Special trade contractors, n.e.c. -----	7.7	20.9	71.9	.367	(D)	(D)	.719	(D)

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Not applicable]

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South Dakota

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-- Not applicable for this report.

Summary of Findings

This report provides results from the 1992 Census of Construction Industries for South Dakota. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 6,238 establishments in this State operating in the construction industries. These establishments accounted for \$1.4 billion in total dollar value of business done.

Most of the 6,238 construction establishments were small. Of the total, 4,239 were nonemployers, and over half of the employer establishments had less than 5 employees. The 712 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 78 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$1.3 billion in total dollar value of business done. Of this amount, \$1.2 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$257 million, leaving net value of construction work of \$977 million. In addition, these establishments paid out \$490 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$561 million. (See Introduction and appendixes for explanation of terms.)

There were 1,999 establishments with total employment averaging 12,836 during the year. Total payroll for 1992 was \$253 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 4,239 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$95.3 million. Most of these establishments, about 84 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

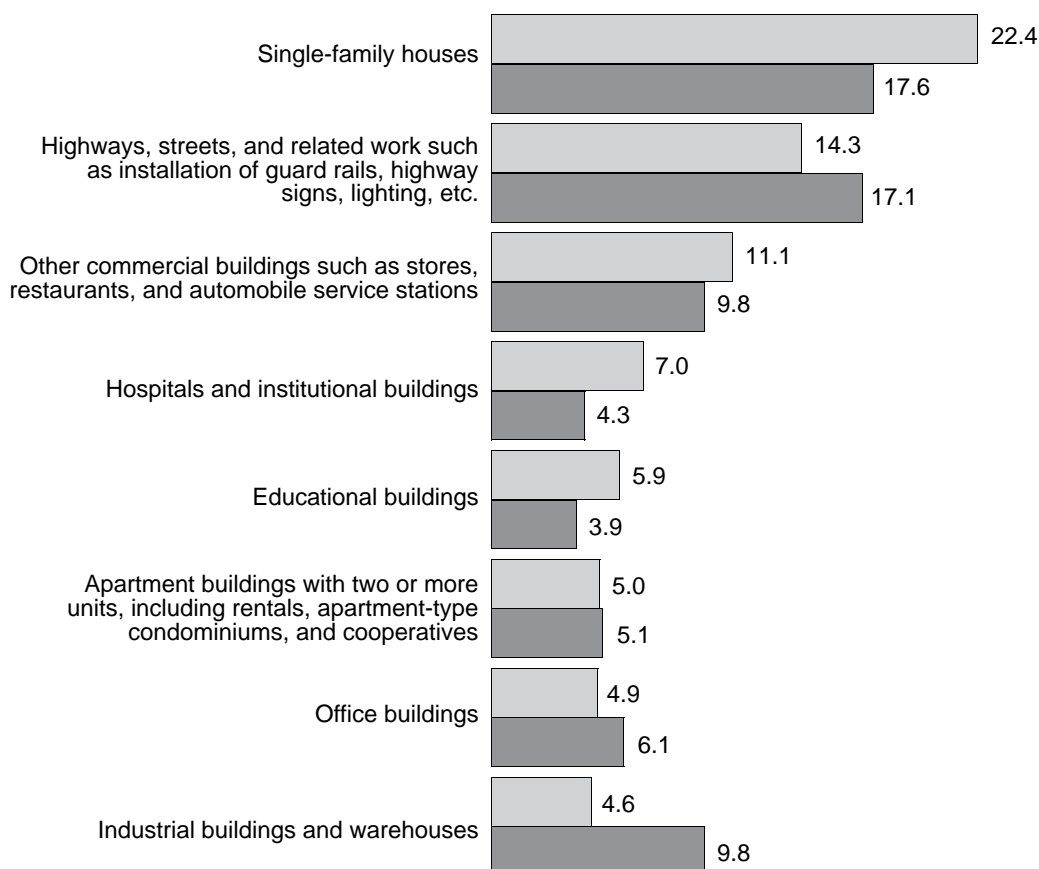



Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

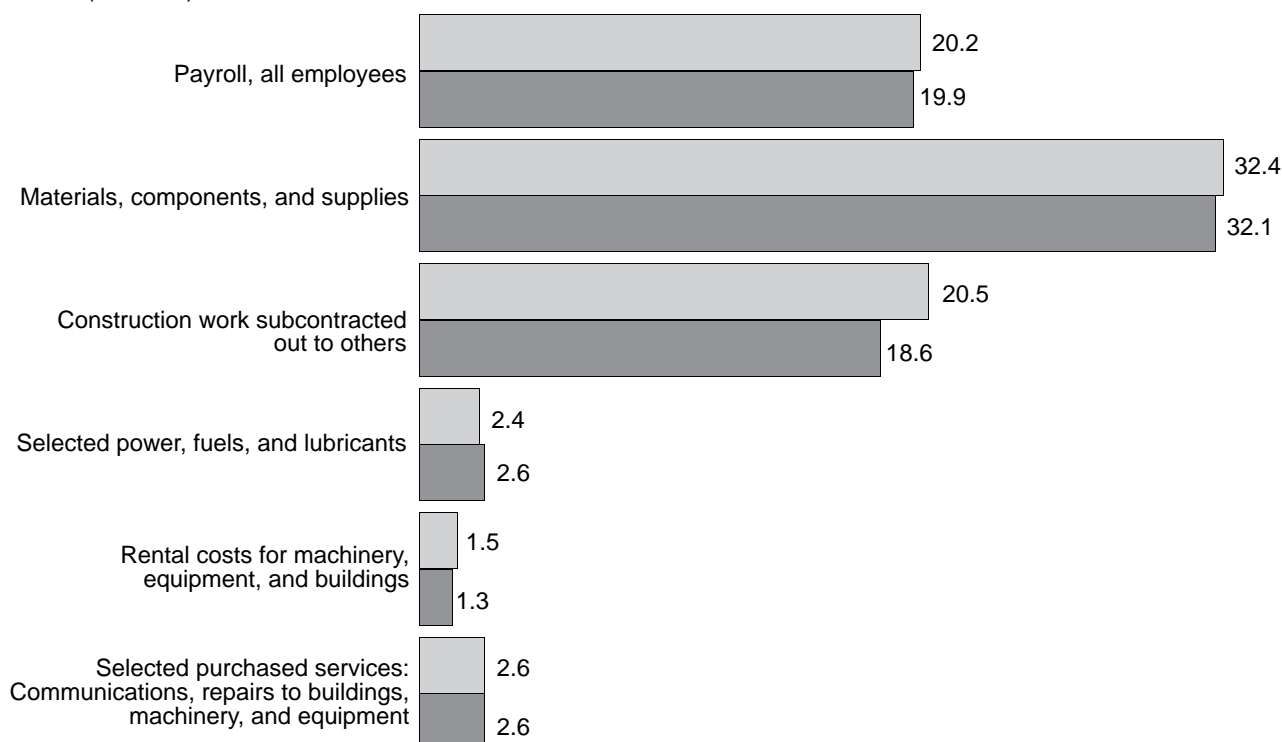


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done	Number	Proprie- tors and working partners	Dollar value of business done¹	Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	6 238	5 679	12 836	1 351 232	4 239	4 288	95 349	1 999	1 391	12 836	1 255 883	2	3
15	Building construction—General contractors and operative builders ----	1 073	940	3 180	508 912	525	535	21 921	548	405	3 180	486 991	5	6
16	Heavy construction other than building construction— contractors-----	436	309	2 689	299 363	158	153	4 258	278	156	2 689	295 105	5	4
17	Special trade contractors -----	4 729	4 431	6 966	542 957	3 556	3 600	69 170	1 173	831	6 966	473 787	3	3
1711	Plumbing, heating, and air-conditioning --	545	449	1 393	121 191	301	308	11 090	244	141	1 393	110 101	7	7
1731	Electrical work-----	385	313	1 107	86 918	219	219	5 268	166	94	1 107	81 650	7	9
	1987													
15, 16, 17	Construction industries² -----	6 533	5 601	9 452	936 284	4 881	4 882	173 401	1 652	719	9 452	762 883	3	2
15	Building construction—General contractors and operative builders ----	1 326	1 049	2 677	339 210	897	865	56 704	429	184	2 677	282 506	5	4
16	Heavy construction other than building construction— contractors-----	335	243	(D)	(D)	139	136	10 478	196	107	(D)	(D)	(D)	(D)
17	Special trade contractors -----	4 780	4 236	5 036	403 502	3 765	3 811	98 403	1 015	425	5 036	305 099	8	6
1711	Plumbing, heating, and air-conditioning --	545	425	1 191	95 070	330	337	14 905	215	88	1 191	80 165	8	7
1731	Electrical work-----	457	359	730	51 411	287	288	10 237	170	71	730	41 174	11	10

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	1 999	12 836	10 294	253 483	188 056	1 233 892	976 794	561 172
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	321	1 144	960	17 381	13 564	141 089	106 861	51 442
1522	Other residential buildings -----	37	284	211	5 588	3 550	44 698	25 061	11 897
1531	Operative builders -----	35	169	*72	3 259	*1 246	*36 459	24 426	*12 294
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	*12	(D)	*54	(D)	792	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c. -----	144	1 518	1 165	31 793	22 423	253 358	143 541	76 466
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	106	1 532	1 330	34 355	27 051	175 209	146 056	92 626
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	3	38	31	(D)	675	3 879	(D)	1 737
1623	Water, sewer, and utility lines -----	55	719	608	21 493	14 645	70 965	60 787	39 081
1629	Heavy construction, n.e.c. -----	114	401	319	8 053	6 373	40 058	30 837	20 508
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	244	1 393	1 026	28 237	20 740	107 170	99 412	54 618
1721	Painting and paper hanging -----	106	412	336	6 103	4 834	19 153	18 415	12 822
1731	Electrical work -----	166	1 107	868	22 701	17 344	79 878	73 915	44 210
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	68	489	437	7 736	6 945	(D)	24 655	14 542
1742	Plastering, drywall, and insulation work -----	52	395	341	7 182	6 211	23 529	22 268	14 752
1743	Terrazzo, tile, marble, and mosaic work -----	*6	68	50	1 006	666	2 892	2 706	2 582
175	Carpentry and floor work:								
1751	Carpentry -----	140	474	406	6 307	5 263	23 138	(D)	12 531
1752	Floor laying and other floor work -----	42	127	110	1 617	(S)	4 990	4 853	3 266
1761	Roofing, siding, and sheet metal work -----	79	764	596	18 215	11 943	62 139	56 027	27 996
1771	Concrete work -----	102	506	445	7 666	6 617	29 841	29 011	16 915
1781	Water well drilling -----	24	87	64	1 545	1 044	5 862	(D)	(D)
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	30	170	142	3 001	2 569	12 550	10 127	6 285
1793	Glass and glazing work -----	20	212	126	3 913	2 088	14 551	(D)	7 038
1794	Excavation work -----	35	188	152	4 270	2 969	14 605	12 294	8 363
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	16	97	66	1 985	1 306	5 418	5 149	3 460
1799	Special trade contractors, n.e.c. -----	43	(D)	379	7 960	5 773	33 602	32 336	21 429

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
437 613	257 097	307 339	18 930	35 256	272 022	9 452	724 664	352 553	2	2	9	15, 16, 17
												15
55 852 13 410	34 229 19 637	*3 349 (S)	*1 579 *383	1 261 *307	7 407 *4 992	700 329	33 376 55 778	15 667 16 850	12 28	14 28	28 66	152 1521 1522
16 246	*12 033	(S)	53	*421	11 889	210	21 888	3 168	35	38	67	1531
(D) 69 200	*619 109 817	— 3 385	*176 3 123	*170 4 006	2 645 31 917	227 1 211	21 672 140 492	7 861 45 219	(D) 8	(D) 9	52 9	154 1541 1542
												16
53 915	29 153	43 385	5 000	10 775	87 289	1 160	117 959	79 109	8	6	17	1611
(D) 25 896 10 648	(D) 10 178 9 221	(D) 8 948 (D)	(D) 1 061 (S)	47 2 989 1 451	822 23 584 (D)	(D) 382 137	(D) 27 659 8 293	(D) 16 441 (D)	(Z) 7 18	(D) 8 17	(Z) 22 27	162 1622 1623 1629
												17
47 725	7 758	57 580	1 490	2 872	18 392	1 191	76 583	39 538	7	7	28	1711
5 615	*737	9 552	331	531	2 048	243	9 473	6 964	14	13	36	1721
31 476	*5 964	37 717	1 179	*2 212	17 604	730	40 111	21 616	7	9	43	1731
10 138 7 516 761	(D) 1 261 186	20 305 23 290 2 603	356 *417 85	1 065 368 28	2 900 1 614 152	292 172 (D)	9 167 11 881 (D)	6 668 7 015 (D)	20 19 36	15 16 23	34 23 25	174 1741 1742 1743
(D) 1 618	(D) 136	11 201 (S)	148 38	302 66	2 640 616	386 (S)	21 980 (S)	10 840 (S)	14 12	(D) 14	28 (Z)	175 1751 1752
30 905	6 112	25 205	(D)	(S)	9 029	483	32 451	16 835	10	7	(S)	1761
12 143	830	19 614	*377	*4 154	*13 241	642	40 870	18 813	17	19	57	1771
3 002	(D)	326	*63	128	1 882	26	1 892	1 054	8	(D)	11	1781
(D) 7 625 3 959	*2 424 (D) *2 311	2 548 9 539 11 299	(D) (D) (S)	92 (D) *434	1 742 1 822 (S)	85 121 164	(D) 6 094 11 676	3 925 3 117 8 611	23 7 20	26 (D) 16	(Z) (D) 64	179 1791 1793 1794 1795
1 689 11 587	269 (S)	3 197 (D)	81 (D)	(D) 75	485 (D)	*128 297	5 495 16 554	3 851 9 245	3 (D)	1 15	(D) (Z)	1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	1 999	1 652	1 723	2 185	1	2	4	5
Proprietors and working partners	1 391	719	807	1 752	3	8	8	8
All employees**	12 836	9 452	8 866	12 327	2	3	3	4
Construction workers:								
March	8 214	6 172	5 802	7 896	2	4	5	3
May	10 771	8 130	7 248	11 482	2	3	4	4
August	11 826	8 751	8 549	12 370	2	3	3	4
November	10 367	7 319	7 216	10 969	2	3	4	3
Average	10 294	7 593	7 416	10 688	2	3	4	4
Other employees:								
March	2 477	1 848	1 434	1 505	3	4	5	7
May	2 580	1 867	(NA)	(NA)	3	4	(NA)	(NA)
August	2 631	1 894	(NA)	(NA)	3	4	(NA)	(NA)
November	2 478	1 825	(NA)	(NA)	3	4	(NA)	(NA)
Average	2 541	1 858	(NA)	(NA)	3	3	(NA)	(NA)
Payroll, all employees	253 483	152 067	117 867	120 057	2	2	3	2
Payroll, construction workers	188 056	113 805	91 165	99 617	2	3	3	3
Payroll, other employees	65 427	38 261	26 701	20 440	3	3	4	3
First quarter payroll, all employees	51 178	30 930	23 422	21 603	2	4	4	3
Fringe benefits, all employees	48 926	26 689	21 602	16 418	3	3	4	2
Legally required expenditures	37 566	20 479	16 213	11 973	4	4	4	3
Voluntary expenditures	11 360	6 210	5 389	4 445	6	4	5	3
Dollar value of business done	1 255 883	762 883	524 010	569 820	3	2	3	3
Value of construction work	1 233 892	724 664	507 258	552 240	3	2	3	3
Value of construction work subcontracted in from others	307 339	158 002	93 110	110 141	5	6	7	4
Other business receipts	21 991	34 832	14 556	17 580	10	5	12	7
Net value of construction†	976 794	582 446	419 189	452 350	2	3	3	3
Value added††	561 172	352 553	228 891	252 573	3	3	3	3
Selected costs	694 710	406 942	292 922	313 626	3	3	3	3
Materials, components, and supplies	407 182	245 032	187 247	199 736	3	3	4	3
Construction work subcontracted out to others	257 097	142 217	88 069	99 890	5	3	3	7
Selected power, fuels, and lubricants	30 431	19 692	17 606	14 000	4	4	5	3
Electricity	2 809	2 189	1 558	855	10	6	9	8
Natural gas	1 237	854	749	475	9	4	9	12
Gasoline and diesel fuel	24 438	14 885	14 257	10 828	4	5	4	3
On highway use	15 469	10 180	(NA)	(NA)	4	5	(NA)	(NA)
Off highway use	8 969	4 704	(NA)	(NA)	7	8	(NA)	(NA)
Other, including lubricating oils and greases	1 946	1 763	1 040	1 842	8	7	10	6
Rental cost for machinery, equipment, and buildings	18 930	9 600	4 625	6 057	8	15	6	4
For machinery and equipment	13 367	6 287	2 968	5 113	10	23	7	5
For buildings	5 563	3 312	1 657	944	10	8	9	10
Selected purchased services	33 102	20 187	13 951	16 906	8	5	3	4
Communication services	6 711	3 252	2 846	2 500	14	5	5	5
Repairs to buildings and other structures	1 961	835	654	565	23	10	22	15
Repairs to machinery and equipment	24 430	16 099	10 450	13 841	9	6	3	4
Ownership of construction projects:								
Value of construction work	1 233 892	724 664	507 258	552 240	3	2	3	3
Government owned	400 003	260 972	145 855	162 681	5	6	7	4
Federal	111 109	87 820	(NA)	(NA)	6	14	(NA)	(NA)
State and local	288 894	173 151	(NA)	(NA)	7	6	(NA)	(NA)
Privately owned	833 888	463 691	361 402	389 558	5	4	5	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	245 560	172 053	6	4
Capital expenditures, other than land -----	35 256	13 816	9	7
New -----	22 223	8 179	10	9
Used -----	13 033	5 636	15	13
Retirements and disposition of depreciable assets -----	8 793	3 700	10	14
End-of-year gross book value of depreciable assets -----	272 022	182 169	6	4
Depreciation charges during year -----	26 328	17 698	6	5
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	37 600	37 947	11	9
Capital expenditures, other than land -----	1 996	2 050	14	19
New buildings and other structures -----	1 523	1 629	16	21
Used buildings and other structures -----	473	*421	31	49
Retirements and disposition of depreciable assets -----	*317	*568	43	54
End-of-year gross book value of depreciable assets -----	39 279	39 429	11	8
Depreciation charges during year -----	2 264	2 331	9	10
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	207 960	134 105	6	5
Capital expenditures, other than land -----	33 260	11 765	10	8
New machinery and equipment, including automobiles and trucks -----	20 700	6 549	10	10
New automobiles and trucks, intended primarily for highway use -----	6 416	2 992	11	11
Used machinery and equipment, including automobiles and trucks -----	12 560	5 215	15	12
Retirements and disposition of depreciable assets -----	8 476	3 131	10	12
End-of-year gross book value of depreciable assets -----	232 743	142 740	6	5
Depreciation charges during year -----	24 064	15 367	6	6

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	1 999	1
Value of construction work	1 233 892	3
Establishments with inventories:		
Number	774	5
Value of construction work	599 340	3
Inventories ¹ :		
End of 1992, materials and supplies	21 265	9
End of 1991, materials and supplies	19 192	10
Establishments with no inventories:		
Number	640	6
Value of construction work	392 341	4
Establishments not reporting:		
Number	585	5
Value of construction work	242 211	5

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	1 999	1 286	361	224	104	17	5	1	—	—
All employees** -----	12 836	2 450	2 281	2 883	3 062	1 160	1 000	(D)	—	—
Payroll, all employees -----	253 483	31 572	36 880	57 626	68 009	28 917	30 478	(D)	—	—
Dollar value of business done -----	1 255 883	195 467	188 633	296 842	329 266	134 298	111 377	(D)	—	—
Value of construction work -----	1 233 892	193 917	184 199	293 356	323 220	128 454	110 745	(D)	—	—
Net value of construction work† -----	976 794	172 659	154 129	239 826	230 712	88 751	90 717	(D)	—	—
Value added†† -----	561 172	98 255	88 917	140 121	124 103	52 611	57 164	(D)	—	—
Cost of materials, components, supplies, and fuels -----	437 613	75 953	69 646	103 190	112 655	41 984	34 185	(D)	—	—
Cost of construction work subcontracted out to others -----	257 097	(S)	30 070	53 530	92 508	39 703	20 028	(D)	—	—
Rental cost for machinery, equipment, and buildings -----	18 930	3 875	3 101	2 786	4 317	4 851	(D)	(D)	—	—
Capital expenditures, other than land -----	35 256	4 368	6 142	9 021	8 942	3 538	3 245	(D)	—	—
End-of-year gross book value of depreciable assets -----	272 022	44 302	36 793	64 939	73 252	24 984	27 752	(D)	—	—
1987										
All employees** -----	9 452	2 204	2 027	2 105	1 740	869	505	—	—	—
Value of construction work -----	724 664	127 420	122 793	155 839	147 620	170 991	(D)	—	—	—
Value added†† -----	352 553	67 282	62 379	77 212	105 820	(D)	39 858	—	—	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	2	7	12	11	6	(Z)	(Z)	(D)	—	—
Net value of construction work† -----	2	10	13	9	4	(Z)	(Z)	(D)	—	—
Capital expenditures, other than land -----	9	16	35	24	6	(Z)	(Z)	(D)	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics		Establishments with dollar value of business done—									
		Total	Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	$10,000,000 to or more
1992											
Number of establishments -----	1 999	(S)	(S)	340	560	339	204	181	49	30	10
All employees** -----	12 836	(S)	(S)	576	1 512	1 820	2 054	2 680	1 417	1 275	1 219
Payroll, all employees -----	253 483	(S)	(S)	5 887	20 221	27 976	35 417	56 498	34 832	33 595	37 213
Dollar value of business done -----	1 255 883	(S)	(S)	23 760	93 723	117 952	146 788	281 762	185 031	217 212	182 455
Value of construction work -----	1 233 892	(S)	(S)	23 347	92 953	116 222	144 766	274 600	183 790	209 273	181 823
Net value of construction work† -----	976 794	(S)	(S)	21 279	83 429	108 163	133 065	230 283	141 167	128 877	123 716
Value added†† -----	561 172	(S)	(S)	12 272	44 638	66 765	77 535	140 703	76 136	64 978	73 872
Cost of materials, components, supplies, and fuels -----	437 613	(S)	(S)	9 419	39 562	43 129	57 552	96 742	66 271	71 838	50 476
Cost of construction work subcontracted out to others -----	257 097	(S)	(S)	(S)	9 523	8 059	11 701	44 317	42 624	80 396	58 107
Rental cost for machinery, equipment, and buildings -----	18 930	(S)	(S)	280	2 070	3 043	2 670	2 620	2 264	2 146	3 783
Capital expenditures, other than land -----	35 256	(S)	(S)	349	2 295	4 552	6 657	4 976	6 889	5 552	3 800
End-of-year gross book value of depreciable assets -----	272 022	(S)	(S)	6 028	30 615	30 955	30 669	47 306	48 668	41 752	34 199
1987											
All employees** -----	9 452	(S)	(S)	(S)	1 568	1 495	1 489	1 846	788	606	737
Value of construction work -----	724 664	(S)	(S)	(S)	73 951	87 433	94 128	160 714	85 203	195 913	(D)
Value added†† -----	352 553	(S)	(S)	(S)	40 605	46 662	50 622	79 389	37 703	30 144	51 908
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	(S)	(S)	14	11	13	14	8	6	(Z)	(Z)
Net value of construction work† -----	2	(S)	(S)	12	10	12	13	10	9	(Z)	(Z)
Capital expenditures, other than land -----	9	(S)	(S)	31	23	23	37	19	20	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

SD-10 SOUTH DAKOTA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 233 892	776 063	282 283	138 723	3	4	5	7
Building construction	857 872	569 288	204 398	84 186	4	5	6	8
Single-family houses	276 696	197 191	53 139	26 366	8	11	9	12
Single-family houses, detached	252 109	177 723	49 957	24 428	8	11	9	12
Single-family houses, attached, including townhouses and townhouse-type condominiums	24 588	19 468	3 182	1 938	18	22	10	17
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	61 800	45 680	11 838	4 283	21	29	9	17
Other residential buildings, including hotels, motels, and tourist cabins	31 686	24 682	4 732	2 272	7	8	16	19
Office buildings	60 032	33 298	19 562	7 172	9	10	19	11
Other commercial buildings such as stores, restaurants, and automobile service stations	137 253	91 122	32 977	13 154	6	6	18	16
Industrial buildings and warehouses	57 213	28 168	14 846	14 199	8	9	10	19
Industrial buildings	38 641	18 948	10 290	9 404	10	10	10	20
Warehouses	18 572	9 220	4 556	*4 795	15	19	21	42
Religious buildings	16 443	8 618	6 429	1 396	17	27	22	36
Educational buildings	72 434	45 245	22 008	5 181	5	6	10	18
Hospitals and institutional buildings	86 109	51 945	29 945	4 219	5	3	12	16
Farm buildings, nonresidential	34 105	26 870	4 029	3 205	22	26	23	25
Amusement, social, and recreational buildings, indoors	9 756	8 694	615	446	7	7	(Z)	30
Other nonresidential buildings	14 345	7 775	4 278	(S)	21	29	28	(S)
Nonbuilding construction	339 197	206 774	77 886	54 537	4	4	8	12
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	176 762	87 008	51 940	37 815	7	8	10	16
Private driveways and parking areas	11 518	6 338	3 382	1 797	26	32	29	39
Bridges, tunnels, and elevated highways	19 389	14 254	925	4 210	7	(Z)	(Z)	34
Conservation and development construction	30 359	23 910	(S)	1 087	17	15	(S)	25
Power and communication transmission lines, towers, and related facilities	41 727	30 936	7 636	3 155	7	8	10	23
Sewers, water mains, and related facilities	38 948	29 444	5 143	4 362	17	19	14	14
Other nonbuilding construction	20 494	14 884	3 499	*2 111	15	15	39	64
Construction work, n.s.k.	36 823	(NA)	(NA)	(NA)	31	(NA)	(NA)	(NA)
1987								
Value of construction work	724 664	427 728	151 730	112 134	2	4	4	6
Building construction	493 200	309 998	105 026	75 710	3	4	6	7
Single-family houses	127 534	78 479	30 473	18 581	8	12	9	16
Single-family houses, detached	116 936	70 195	29 439	17 301	9	13	10	17
Single-family houses, attached, including townhouses and townhouse-type condominiums	10 598	8 284	1 034	1 280	24	29	22	17
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	36 800	11 164	2 726	22 909	6	17	11	3
Other residential buildings, including hotels, motels, and tourist cabins	42 765	33 563	6 376	2 824	4	4	3	27
Office buildings	43 958	26 277	11 750	5 930	7	9	10	15
Other commercial buildings such as stores, restaurants, and automobile service stations	71 246	50 553	13 587	7 106	8	10	15	19
Industrial buildings and warehouses	70 978	55 205	9 947	5 825	6	7	11	19
Industrial buildings	57 505	45 028	7 567	4 910	7	8	11	21
Warehouses	13 473	10 177	2 380	915	16	22	18	17
Religious buildings	13 299	9 077	2 290	1 931	23	32	18	21
Educational buildings	28 410	14 066	10 296	4 047	9	13	13	23
Hospitals and institutional buildings	30 978	17 766	10 030	3 182	17	28	14	28
Farm buildings, nonresidential	12 358	9 151	1 500	1 705	12	13	26	34
Other nonresidential buildings	14 874	6 261	6 051	*2 571	11	19	13	41
Nonbuilding construction	198 392	116 165	46 704	35 522	5	6	8	12
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	124 096	66 025	34 338	23 732	6	9	10	13
Sewers, water mains, and related facilities	21 395	17 891	2 091	1 413	18	20	30	31
Other nonbuilding construction	52 901	32 249	10 275	10 377	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	33 072	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	1 999	10 294	8 214	10 771	11 826	10 367	1	2	2	2	2	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	321	960	769	936	1 165	971	10	12	12	12	13	13
1522	Other residential buildings -----	37	211	201	243	204	197	32	32	33	28	36	34
1531	Operative builders -----	35	*72	*60	*55	*97	*78	33	56	49	57	51	52
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	*12	*54	47	46	*69	*54	62	42	32	33	54	42
1542	Nonresidential buildings, n.e.c. -----	144	1 165	969	1 164	1 333	1 196	16	8	7	7	8	8
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	106	1 330	761	1 588	1 719	1 250	16	8	7	10	9	10
162	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction -----	3	31	(D)	34	35	(D)	(Z)	(Z)	(D)	(Z)	(Z)	(D)
1622	Water, sewer, and utility lines -----	55	608	412	650	732	640	21	7	8	7	7	6
1623	Heavy construction, n.e.c. -----	114	319	(D)	324	367	(D)	16	18	(D)	17	17	(D)
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	244	1 026	895	1 046	1 097	1 063	7	7	7	7	8	8
1721	Painting and paper hanging -----	106	336	285	370	430	260	13	11	13	14	14	10
1731	Electrical work -----	166	868	861	868	894	848	8	8	7	7	8	8
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	68	437	322	402	504	520	12	20	18	18	24	23
1742	Plastering, drywall, and insulation work -----	52	341	306	324	351	385	11	19	20	20	18	22
1743	Terrazzo, tile, marble, and mosaic work -----	*6	50	*59	*51	48	43	58	35	47	41	29	24
175	Carpentry and floor work:												
1751	Carpentry -----	140	406	367	410	458	390	8	13	13	12	13	14
1752	Floor laying and other floor work -----	42	110	(S)	(S)	90	137	18	14	(S)	(S)	17	5
1761	Roofing, siding, and sheet metal work -----	79	596	497	650	664	572	15	9	10	10	9	11
1771	Concrete work -----	102	445	271	525	534	452	12	17	18	18	18	17
1781	Water well drilling -----	24	64	60	69	71	56	6	7	7	8	8	6
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	30	142	130	113	149	176	35	20	15	17	21	28
1793	Glass and glazing work -----	20	126	114	126	137	128	(Z)	8	6	11	5	5
1794	Excavation work -----	35	152	(S)	162	178	160	23	20	(S)	21	19	21
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	16	66	48	61	65	89	16	4	(Z)	4	4	3
1799	Special trade contractors, n.e.c. -----	43	379	(D)	451	436	(D)	24	18	(D)	16	17	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	6.4	19.7	119.9	.205	.355	.208	.249	.015
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.6	15.2	147.0	.123	.396	.243	*.024	*.011
1522	Other residential buildings -----	7.7	19.7	211.8	.125	.300	.439	(S)	*.009
1531	Operative builders -----	4.9	19.3	506.4	.089	.446	.330	(S)	*.001
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c. -----	10.6	20.9	217.5	.125	.273	.433	.013	.012
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	14.5	22.4	131.7	.196	.308	.166	.248	.029
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	12.7	(D)	125.1	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	13.1	29.9	116.7	.303	.365	.143	.126	.015
1629	Heavy construction, n.e.c. -----	3.5	20.1	125.6	.201	.266	.230	(D)	(S)
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	5.7	20.3	104.5	.263	.445	.072	.537	.014
1721	Painting and paper hanging -----	3.9	14.8	57.0	.319	.293	*.039	.499	.017
1731	Electrical work -----	6.7	20.5	92.0	.284	.394	*.075	.472	.015
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	7.2	15.8	(D)	(D)	(D)	(D)	(D)	(D)
1742	Plastering, drywall, and insulation work -----	7.6	18.2	69.0	.305	.319	.054	.990	*.018
1743	Terrazzo, tile, marble, and mosaic work -----	11.3	14.8	57.8	.348	.263	.064	.900	.029
175	Carpentry and floor work:								
1751	Carpentry -----	3.4	13.3	57.0	.273	(D)	(D)	.484	.006
1752	Floor laying and other floor work -----	3.0	12.7	45.4	.324	.324	.027	(S)	.008
1761	Roofing, siding, and sheet metal work -----	9.7	23.8	104.3	.293	.497	.098	.406	(D)
1771	Concrete work -----	5.0	15.2	67.1	.257	.407	.028	.657	.013
1781	Water well drilling -----	3.6	17.8	91.6	.264	.512	(D)	.056	*.011
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	5.7	17.7	88.4	.239	(D)	.193	(S)	(D)
1793	Glass and glazing work -----	10.6	18.5	115.5	.269	.524	(D)	.656	(D)
1794	Excavation work -----	5.4	22.7	96.1	.292	.271	*.158	.774	(S)
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	6.1	20.5	82.1	.366	.312	.050	.590	.015
1799	Special trade contractors, n.e.c. -----	(D)	(D)	88.7	.237	.345	(S)	(D)	(D)

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Not applicable]

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/ structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Appendix D.

Metropolitan Areas

[Titles and definitions shown for MSA's, CMSA's, and PMSA's are those established by the Office of Management and Budget as of June 30, 1993]

Abilene, TX MSA

Taylor County, TX

Akron, OH PMSA—see Cleveland–Akron, OH CMSA

Albany, GA MSA

Dougherty County, GA
Lee County, GA

Albany–Schenectady–Troy, NY MSA

Albany County, NY
Montgomery County, NY
Rensselaer County, NY
Saratoga County, NY
Schenectady County, NY
Schoharie County, NY

Albuquerque, NM MSA

Bernalillo County, NM
Sandoval County, NM
Valencia County, NM

Alexandria, LA MSA

Rapides Parish, LA

Allentown–Bethlehem–Easton, PA MSA

Carbon County, PA
Lehigh County, PA
Northampton County, PA

Altoona, PA MSA

Blair County, PA

Amarillo, TX MSA

Potter County, TX
Randall County, TX

Anchorage, AK MSA

Anchorage Borough, AK

Ann Arbor, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Anniston, AL MSA

Calhoun County, AL

Appleton–Oshkosh–Neenah, WI MSA

Calumet County, WI
Outagamie County, WI
Winnebago County, WI

Asheville, NC MSA

Buncombe County, NC
Madison County, NC

Athens, GA MSA

Clarke County, GA
Madison County, GA
Oconee County, GA

Atlanta, GA MSA

Barrow County, GA
Bartow County, GA

Atlanta, GA MSA—Con.

Carroll County, GA
Cherokee County, GA
Clayton County, GA
Cobb County, GA
Coweta County, GA
DeKalb County, GA
Douglas County, GA
Fayette County, GA
Forsyth County, GA
Fulton County, GA
Gwinnett County, GA
Henry County, GA
Newton County, GA
Paulding County, GA
Pickens County, GA
Rockdale County, GA
Spalding County, GA
Walton County, GA

Atlantic–Cape May, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Augusta–Aiken, GA–SC MSA

Columbia County, GA
McDuffie County, GA
Richmond County, GA
Aiken County, SC
Edgefield County, SC

Austin–San Marcos, TX MSA

Bastrop County, TX
Caldwell County, TX
Hays County, TX
Travis County, TX
Williamson County, TX

Bakersfield, CA MSA

Kern County, CA

Baltimore, MD PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA

Bangor, ME MSA

Penobscot County, ME (part)
Bangor city, ME
Brewer city, ME
Eddington town, ME
Glenburn town, ME
Hampden town, ME
Hermon town, ME
Holden town, ME
Kenduskeag town, ME
Milford town, ME
Old Town city, ME
Orono town, ME
Orrington town, ME
Penobscot Indian Island Reservation, ME
Veazie town, ME

Bangor, ME MSA—Con.

Waldo County, ME (part)
Winterport town, ME

Barnstable–Yarmouth, MA MSA

Barnstable County, MA (part)
Barnstable city, MA
Brewster town, MA
Chatham town, MA
Dennis town, MA
Eastham town, MA
Harwich town, MA
Mashpee town, MA
Orleans town, MA
Sandwich town, MA
Yarmouth town, MA

Baton Rouge, LA MSA

Ascension Parish, LA
East Baton Rouge Parish, LA
Livingston Parish, LA
West Baton Rouge Parish, LA

Beaumont–Port Arthur, TX MSA

Hardin County, TX
Jefferson County, TX
Orange County, TX

Bellingham, WA MSA

Whatcom County, WA

Benton Harbor, MI MSA

Berrien County, MI

Bergen–Passaic, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Billings, MT MSA

Yellowstone County, MT

Biloxi–Gulfport–Pascagoula, MS MSA

Hancock County, MS
Harrison County, MS
Jackson County, MS

Binghamton, NY MSA

Broome County, NY
Tioga County, NY

Birmingham, AL MSA

Blount County, AL
Jefferson County, AL
St. Clair County, AL
Shelby County, AL

Bismarck, ND MSA

Burleigh County, ND
Morton County, ND

Bloomington, IN MSA

Monroe County, IN

Bloomington–Normal, IL MSA

McLean County, IL

Boise City, ID MSA

Ada County, ID

Canyon County, ID

**Boston, MA–NH PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA**

Boston, MA–NH PMSA

Bristol County, MA (part)

Berkley town, MA

Dighton town, MA

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Essex town, MA

Gloucester city, MA

Hamilton town, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Manchester town, MA

Marblehead town, MA

Middleton town, MA

Nahant town, MA

Newbury town, MA

Newburyport city, MA

Peabody city, MA

Rockport town, MA

Rowley town, MA

Salem city, MA

Salisbury town, MA

Saugus town, MA

Swampscott town, MA

Topsfield town, MA

Wenham town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Holliston town, MA

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Lincoln town, MA

Littleton town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Sherborn town, MA

Shirley town, MA

Somerville city, MA

Stoneham town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Middlesex County, MA (part)

Stow town, MA

Sudbury town, MA

Townsend town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

Winchester town, MA

Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Cohasset town, MA

Dedham town, MA

Dover town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Millis town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Plainville town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Norwell town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

Suffolk County, MA

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA

Blackstone town, MA

Bolton town, MA

Harvard town, MA

Hopedale town, MA

Lancaster town, MA

Mendon town, MA

Milford town, MA

Millville town, MA

Southborough town, MA

Upton town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Rockingham County, NH (part)

Seabrook town, NH

South Hampton town, NH

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Halifax town, MA

Hanson town, MA

Lakeville town, MA

Middleborough town, MA

Plympton town, MA

West Bridgewater town, MA

Whitman town, MA

Fitchburg–Leominster, MA PMSA

Middlesex County, MA (part)

Ashby town, MA

Worcester County, MA (part)

Ashburnham town, MA

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lunenburg town, MA

Templeton town, MA

Westminster town, MA

Winchendon town, MA

Lawrence, MA–NH PMSA

Essex County, MA (part)

Andover town, MA

Boxford town, MA

Georgetown town, MA

Groveland town, MA

Haverhill city, MA

Lawrence city, MA

Merrimac town, MA

Methuen city, MA

North Andover town, MA

West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH

Chester town, NH

Danville town, NH

Derry town, NH

Fremont town, NH

Hampstead town, NH

Kingston town, NH

Newton town, NH

Plaistow town, NH

Raymond town, NH

Salem town, NH

Sandown town, NH

Windham town, NH

Lowell, MA–NH PMSA

Middlesex County, MA (part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Dunstable town, MA

Groton town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Tyngsborough town, MA

Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Manchester, NH PMSA
 Hillsborough County, NH (part)
 Bedford town, NH
 Goffstown town, NH
 Manchester city, NH
 Weare town, NH
 Merrimack County, NH (part)
 Allentown town, NH
 Hooksett town, NH
 Rockingham County, NH (part)
 Auburn town, NH
 Candia town, NH
 Londonderry town, NH
 Nashua, NH PMSA
 Hillsborough County, NH (part)
 Amherst town, NH
 Brookline town, NH
 Greenville town, NH
 Hollis town, NH
 Hudson town, NH
 Litchfield town, NH
 Mason town, NH
 Merrimack town, NH
 Milford town, NH
 Mont Vernon town, NH
 Nashua city, NH
 New Ipswich town, NH
 Wilton town, NH
 New Bedford, MA PMSA
 Bristol County, MA (part)
 Acushnet town, MA
 Dartmouth town, MA
 Fairhaven town, MA
 Freetown town, MA
 New Bedford city, MA
 Plymouth County, MA (part)
 Marion town, MA
 Mattapoisett town, MA
 Rochester town, MA
 Portsmouth–Rochester, NH–ME PMSA
 York County, ME (part)
 Berwick town, ME
 Eliot town, ME
 Kittery town, ME
 South Berwick town, ME
 York town, ME
 Rockingham County, NH (part)
 Brentwood town, NH
 East Kingston town, NH
 Epping town, NH
 Exeter town, NH
 Greenland town, NH
 Hampton town, NH
 Hampton Falls town, NH
 Kensington town, NH
 New Castle town, NH
 Newfields town, NH
 Newington town, NH
 Newmarket town, NH
 North Hampton town, NH
 Portsmouth city, NH
 Rye town, NH
 Stratham town, NH
 Strafford County, NH (part)
 Barrington town, NH
 Dover city, NH
 Durham town, NH
 Farmington town, NH
 Lee town, NH
 Madbury town, NH
 Milton town, NH
 Rochester city, NH
 Rollinsford town, NH
 Somersworth city, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Worcester, MA–CT PMSA
 Windham County, CT (part)
 Thompson town, CT
 Hampden County, MA (part)
 Holland town, MA
 Worcester County, MA (part)
 Auburn town, MA
 Barre town, MA
 Boylston town, MA
 Brookfield town, MA
 Charlton town, MA
 Clinton town, MA
 Douglas town, MA
 Dudley town, MA
 East Brookfield town, MA
 Grafton town, MA
 Holden town, MA
 Leicester town, MA
 Millbury town, MA
 Northborough town, MA
 Northbridge town, MA
 North Brookfield town, MA
 Oakham town, MA
 Oxford town, MA
 Paxton town, MA
 Princeton town, MA
 Rutland town, MA
 Shrewsbury town, MA
 Southbridge town, MA
 Spencer town, MA
 Sterling town, MA
 Sturbridge town, MA
 Sutton town, MA
 Uxbridge town, MA
 Webster town, MA
 Westborough town, MA
 West Boylston town, MA
 West Brookfield town, MA
 Worcester city, MA

**Boulder–Longmont, CO PMSA—see
Denver–Boulder–Greeley, CO CMSA****Brazoria, TX PMSA—see Houston–
Galveston–Brazoria, TX CMSA****Bremerton, WA PMSA—see Seattle–
Tacoma–Bremerton, WA CMSA****Bridgeport, CT PMSA—see New York–
Northern New Jersey–Long Island, NY–
NJ–CT–PA CMSA****Brockton, MA PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Brownsville–Harlingen–San Benito, TX MSA**

Cameron County, TX

Bryan–College Station, TX MSA

Brazos County, TX

Buffalo–Niagara Falls, NY MSA

Erie County, NY
 Niagara County, NY

Burlington, VT MSA

Chittenden County, VT (part)
 Burlington city, VT
 Charlotte town, VT
 Colchester town, VT
 Essex Junction village, VT
 Essex town balance, VT
 Hinesburg town, VT
 Jericho town, VT
 Jericho village, VT
 Milton town, VT
 Milton village, VT
 Richmond town, VT
 St. George town, VT
 Shelburne town, VT

Burlington, VT MSA—Con.

Chittenden County, VT (part)—Con.
 South Burlington city, VT
 Williston town, VT
 Winooski city, VT
 Franklin County, VT (part)
 Fairfax town, VT
 Georgia town, VT
 St. Albans city, VT
 St. Albans town, VT
 Swanton town, VT
 Swanton village, VT
 Grand Isle County, VT (part)
 Grand Isle town, VT
 South Hero town, VT

Canton–Massillon, OH MSA

Carroll County, OH
 Stark County, OH

Casper, WY MSA

Natrona County, WY

Cedar Rapids, IA MSA

Linn County, IA

Champaign–Urbana, IL MSA

Champaign County, IL

Charleston–North Charleston, SC MSA

Berkeley County, SC
 Charleston County, SC
 Dorchester County, SC

Charleston, WV MSA

Kanawha County, WV
 Putnam County, WV

Charlotte–Gastonia–Rock Hill, NC–SC MSA

Cabarrus County, NC
 Gaston County, NC
 Lincoln County, NC
 Mecklenburg County, NC
 Rowan County, NC
 Union County, NC
 York County, SC

Charlottesville, VA MSA

Albemarle County, VA
 Fluvanna County, VA
 Greene County, VA
 Charlottesville city, VA

Chattanooga, TN–GA MSA

Catoosa County, GA
 Dade County, GA
 Walker County, GA
 Hamilton County, TN
 Marion County, TN

Cheyenne, WY MSA

Laramie County, WY

**Chicago, IL PMSA—see Chicago–Gary–
Kenosha, IL–IN–WI CMSA****Chicago–Gary–Kenosha, IL–IN–WI CMSA**

Chicago, IL PMSA
 Cook County, IL
 DeKalb County, IL
 DuPage County, IL
 Grundy County, IL
 Kane County, IL
 Kendall County, IL
 Lake County, IL
 McHenry County, IL
 Will County, IL
 Gary, IN PMSA
 Lake County, IN
 Porter County, IN
 Kankakee, IL PMSA
 Kankakee County, IL

Chicago–Gary–Kenosha, IL–IN–WI CMSA—Con.

Kenosha, WI PMSA
Kenosha County, WI

Chico–Paradise, CA MSA

Butte County, CA

Cincinnati, OH–KY–IN PMSA—see

Cincinnati–Hamilton, OH–KY–IN CMSA

Cincinnati–Hamilton, OH–KY–IN CMSA

Cincinnati, OH–KY–IN PMSA
Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH
Hamilton–Middletown, OH PMSA
Butler County, OH

Clarksville–Hopkinsville, TN–KY MSA

Christian County, KY
Montgomery County, TN

Cleveland–Lorain–Elyria, OH PMSA—see

Cleveland–Akron, OH CMSA

Cleveland–Akron, OH CMSA

Akron, OH PMSA
Portage County, OH
Summit County, OH
Cleveland–Lorain–Elyria, OH PMSA
Ashtabula County, OH
Cuyahoga County, OH
Geauga County, OH
Lake County, OH
Lorain County, OH
Medina County, OH

Colorado Springs, CO MSA

El Paso County, CO

Columbia, MO MSA

Boone County, MO

Columbia, SC MSA

Lexington County, SC
Richland County, SC

Columbus, GA–AL MSA

Russell County, AL
Chattahoochee County, GA
Harris County, GA
Muscogee County, GA

Columbus, OH MSA

Delaware County, OH
Fairfield County, OH
Franklin County, OH
Licking County, OH
Madison County, OH
Pickaway County, OH

Corpus Christi, TX MSA

Nueces County, TX
San Patricio County, TX

Cumberland, MD–WV MSA

Allegany County, MD
Mineral County, WV

Dallas, TX PMSA—see Dallas–Fort Worth, TX CMSA

Dallas–Fort Worth, TX CMSA

Dallas, TX PMSA
Collin County, TX
Dallas County, TX
Denton County, TX
Ellis County, TX
Henderson County, TX
Hunt County, TX
Kaufman County, TX
Rockwall County, TX
Fort Worth–Arlington, TX PMSA
Hood County, TX
Johnson County, TX
Parker County, TX
Tarrant County, TX

Danbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Danville, VA MSA

Pittsylvania County, VA
Danville city, VA

Davenport–Moline–Rock Island, IA–IL MSA

Henry County, IL
Rock Island County, IL
Scott County, IA

Dayton–Springfield, OH MSA

Clark County, OH
Greene County, OH
Miami County, OH
Montgomery County, OH

Daytona Beach, FL MSA

Flagler County, FL
Volusia County, FL

Decatur, AL MSA

Lawrence County, AL
Morgan County, AL

Decatur, IL MSA

Macon County, IL

Denver, CO PMSA—see Denver–Boulder–Greeley, CO CMSA

Denver–Boulder–Greeley, CO CMSA

Boulder–Longmont, CO PMSA
Boulder County, CO
Denver, CO PMSA
Adams County, CO
Arapahoe County, CO
Denver County, CO
Douglas County, CO
Jefferson County, CO
Greeley, CO PMSA
Weld County, CO

Des Moines, IA MSA

Dallas County, IA
Polk County, IA
Warren County, IA

Detroit, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Detroit–Ann Arbor–Flint, MI CMSA

Ann Arbor, MI PMSA
Lenawee County, MI
Livingston County, MI
Washtenaw County, MI
Detroit, MI PMSA
Lapeer County, MI
Macomb County, MI
Monroe County, MI
Oakland County, MI
St. Clair County, MI
Wayne County, MI

Detroit–Ann Arbor–Flint, MI CMSA—Con.

Flint, MI PMSA
Genesee County, MI

Dothan, AL MSA

Dale County, AL
Houston County, AL

Dover, DE MSA

Kent County, DE

Dubuque, IA MSA

Dubuque County, IA

Duluth–Superior, MN–WI MSA

St. Louis County, MN
Douglas County, WI

Dutchess County, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Eau Claire, WI MSA

Chippewa County, WI
Eau Claire County, WI

El Paso, TX MSA

El Paso County, TX

Elkhart–Goshen, IN MSA

Elkhart County, IN

Elmira, NY MSA

Chemung County, NY

Enid, OK MSA

Garfield County, OK

Erie, PA MSA

Erie County, PA

Eugene–Springfield, OR MSA

Lane County, OR

Evansville–Henderson, IN–KY MSA

Posey County, IN
Vanderburgh County, IN
Warrick County, IN
Henderson County, KY

Fargo–Moorhead, ND–MN MSA

Clay County, MN
Cass County, ND

Fayetteville, NC MSA

Cumberland County, NC

Fayetteville–Springdale–Rogers, AR MSA

Benton County, AR
Washington County, AR

Fitchburg–Leominster, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Flint, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Florence, AL MSA

Colbert County, AL
Lauderdale County, AL

Florence, SC MSA

Florence County, SC

Fort Collins–Loveland, CO MSA

Larimer County, CO

Fort Lauderdale, FL PMSA—see Miami–Fort Lauderdale, FL CMSA

Fort Myers–Cape Coral, FL MSA

Lee County, FL

Fort Pierce–Port St. Lucie, FL MSA

Martin County, FL
St. Lucie County, FL

Fort Smith, AR—OK MSA

Crawford County, AR
Sebastian County, AR
Sequoyah County, OK

Fort Walton Beach, FL MSA

Okaloosa County, FL

Fort Wayne, IN MSA

Adams County, IN
Allen County, IN
De Kalb County, IN
Huntington County, IN
Wells County, IN
Whitley County, IN

Fort Worth—Arlington, TX PMSA—see

Dallas—Fort Worth, TX CMSA

Fresno, CA MSA

Fresno County, CA
Madera County, CA

Gadsden, AL MSA

Etowah County, AL

Gainesville, FL MSA

Alachua County, FL

**Galveston—Texas City, TX PMSA—see
Houston—Galveston—Brazoria, TX CMSA****Gary, IN PMSA—see Chicago—Gary—
Kenosha, IL—IN—WI CMSA****Glens Falls, NY MSA**

Warren County, NY
Washington County, NY

Goldsboro, NC MSA

Wayne County, NC

Grand Forks, ND—MN MSA

Polk County, MN
Grand Forks County, ND

Grand Rapids—Muskegon—Holland, MI MSA

Allegan County, MI
Kent County, MI
Muskegon County, MI
Ottawa County, MI

Great Falls, MT MSA

Cascade County, MT

**Greeley, CO PMSA—see Denver—Boulder—
Greeley, CO CMSA****Green Bay, WI MSA**

Brown County, WI

**Greensboro—Winston-Salem—High Point, NC
MSA**

Alamance County, NC
Davidson County, NC
Davie County, NC
Forsyth County, NC
Guilford County, NC
Randolph County, NC
Stokes County, NC
Yadkin County, NC

Greenville, NC MSA

Pitt County, NC

Greenville—Spartanburg—Anderson, SC MSA

Anderson County, SC
Cherokee County, SC
Greenville County, SC
Pickens County, SC
Spartanburg County, SC

**Hagerstown, MD PMSA—see Washington—
Baltimore, DC—MD—VA—WV CMSA****Hamilton—Middletown, OH PMSA—see
Cincinnati—Hamilton, OH—KY—IN CMSA****Harrisburg—Lebanon—Carlisle, PA MSA**

Cumberland County, PA
Dauphin County, PA
Lebanon County, PA
Perry County, PA

Hartford, CT MSA

Hartford County, CT (part)
Avon town, CT
Berlin town, CT
Bloomfield town, CT
Bristol city, CT
Burlington town, CT
Canton town, CT
East Granby town, CT
East Hartford town, CT
East Windsor town, CT
Enfield town, CT
Farmington town, CT
Glastonbury town, CT
Granby town, CT
Hartford city, CT
Manchester town, CT
Marlborough town, CT
New Britain city, CT
Newington town, CT
Plainville town, CT
Rocky Hill town, CT
Simsbury town, CT
Southington town, CT
South Windsor town, CT
Suffield town, CT
West Hartford town, CT
Wethersfield town, CT
Windsor town, CT
Windsor Locks town, CT

Litchfield County, CT (part)
Barkhamsted town, CT
Harwinton town, CT
New Hartford town, CT
Plymouth town, CT
Winchester town, CT

Middlesex County, CT (part)
Cromwell town, CT
Durham town, CT
East Haddam town, CT
East Hampton town, CT
Haddam town, CT
Middlefield town, CT
Middletown city, CT
Portland town, CT

New London County, CT (part)
Colchester town, CT
Lebanon town, CT

Tolland County, CT (part)
Andover town, CT
Bolton town, CT
Columbia town, CT
Coventry town, CT
Ellington town, CT
Hebron town, CT
Mansfield town, CT
Somers town, CT
Stafford town, CT
Tolland town, CT
Vernon town, CT
Willington town, CT

Windham County, CT (part)
Ashford town, CT
Chaplin town, CT
Windham town, CT

Hickory—Morganton, NC MSA

Alexander County, NC
Burke County, NC
Caldwell County, NC
Catawba County, NC

Honolulu, HI MSA

Honolulu County, HI

Houma, LA MSA

Lafourche Parish, LA
Terrebonne Parish, LA

**Houston, TX PMSA—see Houston—Galveston—
Brazoria, TX CMSA****Houston—Galveston—Brazoria, TX CMSA**

Brazoria, TX PMSA
Brazoria County, TX
Galveston—Texas City, TX PMSA
Galveston County, TX
Houston, TX PMSA
Chambers County, TX
Fort Bend County, TX
Harris County, TX
Liberty County, TX
Montgomery County, TX
Waller County, TX

Huntington—Ashland, WV—KY—OH MSA

Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Huntsville, AL MSA

Limestone County, AL
Madison County, AL

Indianapolis, IN MSA

Boone County, IN
Hamilton County, IN
Hancock County, IN
Hendricks County, IN
Johnson County, IN
Madison County, IN
Marion County, IN
Morgan County, IN
Shelby County, IN

Iowa City, IA MSA

Johnson County, IA

Jackson, MI MSA

Jackson County, MI

Jackson, MS MSA

Hinds County, MS
Madison County, MS
Rankin County, MS

Jackson, TN MSA

Madison County, TN

Jacksonville, FL MSA

Clay County, FL
Duval County, FL
Nassau County, FL
St. Johns County, FL

Jacksonville, NC MSA

Onslow County, NC

Jamestown, NY MSA

Chautauqua County, NY

Janesville—Beloit, WI MSA

Rock County, WI

Jersey City, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Johnson City—Kingsport—Bristol, TN—VA MSA

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol city, VA

Johnstown, PA MSA

Cambria County, PA
Somerset County, PA

Joplin, MO MSA

Jasper County, MO
Newton County, MO

Kalamazoo—Battle Creek, MI MSA

Calhoun County, MI
Kalamazoo County, MI
Van Buren County, MI

Kankakee, IL PMSA—see Chicago—Gary—Kenosha, IL—IN—WI CMSA

Kansas City, MO—KS MSA

Johnson County, KS
Leavenworth County, KS
Miami County, KS
Wyandotte County, KS
Cass County, MO
Clay County, MO
Clinton County, MO
Jackson County, MO
Lafayette County, MO
Platte County, MO
Ray County, MO

Kenosha, WI PMSA—see Chicago—Gary—Kenosha, IL—IN—WI CMSA

Killeen—Temple, TX MSA

Bell County, TX
Coryell County, TX

Knoxville, TN MSA

Anderson County, TN
Blount County, TN
Knox County, TN
Loudon County, TN
Sevier County, TN
Union County, TN

Kokomo, IN MSA

Howard County, IN
Tipton County, IN

La Crosse, WI—MN MSA

Houston County, MN
La Crosse County, WI

Lafayette, LA MSA

Acadia Parish, LA
Lafayette Parish, LA
St. Landry Parish, LA
St. Martin Parish, LA

Lafayette, IN MSA

Clinton County, IN
Tippecanoe County, IN

Lake Charles, LA MSA

Calcasieu Parish, LA

Lakeland—Winter Haven, FL MSA

Polk County, FL

Lancaster, PA MSA

Lancaster County, PA

Lansing—East Lansing, MI MSA

Clinton County, MI
Eaton County, MI
Ingham County, MI

Laredo, TX MSA

Webb County, TX

Las Cruces, NM MSA

Dona Ana County, NM

Las Vegas, NV—AZ MSA

Mohave County, AZ
Clark County, NV
Nye County, NV

Lawrence, KS MSA

Douglas County, KS

Lawrence, MA—NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Lawton, OK MSA

Comanche County, OK

Lewiston—Auburn, ME MSA

Androscoggin County, ME (part)
Auburn city, ME
Greene town, ME
Lewiston city, ME
Lisbon town, ME
Mechanic Falls town, ME
Poland town, ME
Sabattus town, ME
Turner town, ME
Wales town, ME

Lexington, KY MSA

Bourbon County, KY
Clark County, KY
Fayette County, KY
Jessamine County, KY
Madison County, KY
Scott County, KY
Woodford County, KY

Lima, OH MSA

Allen County, OH
Auglaize County, OH

Lincoln, NE MSA

Lancaster County, NE

Little Rock—North Little Rock, AR MSA

Faulkner County, AR
Lonoke County, AR
Pulaski County, AR
Saline County, AR

Longview—Marshall, TX MSA

Gregg County, TX
Harrison County, TX
Upshur County, TX

Los Angeles—Riverside—Orange County, CA CMSA

Los Angeles—Long Beach, CA PMSA
Los Angeles County, CA
Orange County, CA PMSA
Orange County, CA
Riverside—San Bernardino, CA PMSA
Riverside County, CA
San Bernardino County, CA
Ventura, CA PMSA
Ventura County, CA

Los Angeles—Long Beach, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Louisville, KY—IN MSA

Clark County, IN
Floyd County, IN
Harrison County, IN
Scott County, IN
Bullitt County, KY
Jefferson County, KY
Oldham County, KY

Lowell, MA—NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Lubbock, TX MSA

Lubbock County, TX

Lynchburg, VA MSA

Amherst County, VA
Bedford County, VA
Campbell County, VA
Bedford city, VA
Lynchburg city, VA

Macon, GA MSA

Bibb County, GA
Houston County, GA
Jones County, GA
Peach County, GA
Twiggs County, GA

Madison, WI MSA

Dane County, WI

Manchester, NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Mansfield, OH MSA

Crawford County, OH
Richland County, OH

McAllen—Edinburg—Mission, TX MSA

Hidalgo County, TX

Medford—Ashland, OR MSA

Jackson County, OR

Melbourne—Titusville—Palm Bay, FL MSA

Brevard County, FL

Memphis, TN—AR—MS MSA

Crittenden County, AR
DeSoto County, MS
Fayette County, TN
Shelby County, TN
Tipton County, TN

Merced, CA MSA

Merced County, CA

Miami—Fort Lauderdale, FL CMSA

Fort Lauderdale, FL PMSA
Broward County, FL
Miami, FL PMSA
Dade County, FL

Miami, FL PMSA—see Miami—Fort Lauderdale, FL CMSA

Middlesex—Somerset—Hunterdon, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Milwaukee—Waukesha, WI PMSA—see Milwaukee—Racine, WI CMSA

Milwaukee—Racine, WI CMSA

Milwaukee—Waukesha, WI PMSA
Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI

Milwaukee–Racine, WI CMSA—Con.

Racine, WI PMSA
Racine County, WI

Minneapolis–St. Paul, MN–WI MSA

Anoka County, MN
Carver County, MN
Chisago County, MN
Dakota County, MN
Hennepin County, MN
Isanti County, MN
Ramsey County, MN
Scott County, MN
Sherburne County, MN
Washington County, MN
Wright County, MN
Pierce County, WI
St. Croix County, WI

Mobile, AL MSA

Baldwin County, AL
Mobile County, AL

Modesto, CA MSA

Stanislaus County, CA

Monmouth–Ocean, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Monroe, LA MSA**

Ouachita Parish, LA

Montgomery, AL MSA

Autauga County, AL
Elmore County, AL
Montgomery County, AL

Muncie, IN MSA

Delaware County, IN

Myrtle Beach, SC MSA

Horry County, SC

Naples, FL MSA

Collier County, FL

Nashua, NH PMSA—see Boston–**Worcester–Lawrence, MA–NH–ME–CT CMSA****Nashville, TN MSA**

Cheatham County, TN
Davidson County, TN
Dickson County, TN
Robertson County, TN
Rutherford County, TN
Sumner County, TN
Williamson County, TN
Wilson County, TN

Nassau–Suffolk, NY PMSA—see New**York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New Bedford, MA PMSA—see Boston–****Worcester–Lawrence, MA–NH–ME–CT CMSA****New Haven–Meriden, CT PMSA—see New****York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New London–Norwich, CT–RI MSA**

Middlesex County, CT (part)
Fenwick borough, CT
Old Saybrook town, CT
New London County, CT (part)
Bozrah town, CT
East Lyme town, CT
Franklin town, CT
Griswold town balance, CT
Groton city, CT
Groton town balance, CT

New London–Norwich, CT–RI MSA—Con.

New London County, CT (part)—Con.
Groton Long Point borough, CT
Jewett City borough, CT
Ledyard town, CT
Lisbon town, CT
Montville town, CT
New London city, CT
North Stonington town, CT
Norwich city, CT
Old Lyme town, CT
Preston town, CT
Salem town, CT
Sprague town, CT
Stonington borough, CT
Stonington town, CT
Waterford town, CT
Windham County, CT (part)
Canterbury town, CT
Plainfield town, CT
Washington County, RI (part)
Hopkinton town, RI
Westerly town, RI

New Orleans, LA MSA

Jefferson Parish, LA
Orleans Parish, LA
Plaquemines Parish, LA
St. Bernard Parish, LA
St. Charles Parish, LA
St. James Parish, LA
St. John the Baptist Parish, LA
St. Tammany Parish, LA

New York, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**

Bergen–Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (part)
Bridgeport city, CT
Easton town, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (part)
Ansonia city, CT
Beacon Falls town, CT
Derby city, CT
Milford city (balance), CT
Oxford town, CT
Seymour town, CT
Woodmont borough, CT
Danbury, CT PMSA
Fairfield County, CT (part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown borough, CT
Newtown town, CT
Redding town, CT
Ridgefield town, CT
Sherman town, CT
Litchfield County, CT (part)
Bridgewater town, CT
New Milford town, CT
Roxbury town, CT
Washington town, CT
Dutchess County, NY PMSA
Dutchess County, NY

New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA—Con.

Jersey City, NJ PMSA
Hudson County, NJ
Middlesex–Somerset–Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth–Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau–Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY
New Haven–Meriden, CT PMSA
Middlesex County, CT (part)
Clinton town, CT
Killingworth town, CT
New Haven County, CT (part)
Bethany town, CT
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT
Woodbridge town, CT
New York, NY PMSA
Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY
Queens County, NY
Richmond County, NY
Rockland County, NY
Westchester County, NY
Newark, NJ PMSA
Essex County, NJ
Morris County, NJ
Sussex County, NJ
Union County, NJ
Warren County, NJ
Newburgh, NY–PA PMSA
Orange County, NY
Pike County, PA
Stamford–Norwalk, CT PMSA
Fairfield County, CT (part)
Darien town, CT
Greenwich town, CT
New Canaan town, CT
Norwalk city, CT
Stamford city, CT
Weston town, CT
Westport town, CT
Wilton town, CT
Trenton, NJ PMSA
Mercer County, NJ
Waterbury, CT PMSA
Litchfield County, CT (part)
Bethlehem town, CT
Thomaston town, CT
Watertown town, CT
Woodbury town, CT
New Haven County, CT (part)
Middlebury town, CT
Naugatuck borough, CT
Prospect town, CT
Southbury town, CT
Waterbury city, CT
Wolcott town, CT

Newark, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Newburgh, NY–PA PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Norfolk–Virginia Beach–Newport News, VA–NC MSA

Currituck County, NC
Gloucester County, VA
Isle of Wight County, VA
James City County, VA
Mathews County, VA
York County, VA
Chesapeake city, VA
Hampton city, VA
Newport News city, VA
Norfolk city, VA
Poquoson city, VA
Portsmouth city, VA
Suffolk city, VA
Virginia Beach city, VA
Williamsburg city, VA

Oakland, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Ocala, FL MSA

Marion County, FL

Odessa–Midland, TX MSA

Ector County, TX
Midland County, TX

Oklahoma City, OK MSA

Canadian County, OK
Cleveland County, OK
Logan County, OK
McClain County, OK
Oklahoma County, OK
Pottawatomie County, OK

Olympia, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Omaha, NE–IA MSA

Pottawattamie County, IA
Cass County, NE
Douglas County, NE
Sarpy County, NE
Washington County, NE

Orange County, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Orlando, FL MSA

Lake County, FL
Orange County, FL
Osceola County, FL
Seminole County, FL

Owensboro, KY MSA

Daviess County, KY

Panama City, FL MSA

Bay County, FL

Parkersburg–Marietta, WV–OH MSA

Washington County, OH
Wood County, WV

Pensacola, FL MSA

Escambia County, FL
Santa Rosa County, FL

Peoria–Pekin, IL MSA

Peoria County, IL
Tazewell County, IL
Woodford County, IL

Philadelphia, PA–NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Atlantic–Cape May, NJ PMSA

Atlantic County, NJ
Cape May County, NJ

Philadelphia, PA–NJ PMSA

Burlington County, NJ
Camden County, NJ
Gloucester County, NJ
Salem County, NJ
Bucks County, PA
Chester County, PA
Delaware County, PA
Montgomery County, PA

Philadelphia County, PA

Vineland–Millville–Bridgeton, NJ PMSA

Cumberland County, NJ

Wilmington–Newark, DE–MD PMSA

New Castle County, DE
Cecil County, MD

Phoenix–Mesa, AZ MSA

Maricopa County, AZ
Pinal County, AZ

Pine Bluff, AR MSA

Jefferson County, AR

Pittsburgh, PA MSA

Allegheny County, PA
Beaver County, PA
Butler County, PA
Fayette County, PA
Washington County, PA
Westmoreland County, PA

Pittsfield, MA MSA

Berkshire County, MA (part)

Adams town, MA
Cheshire town, MA
Dalton town, MA
Hinsdale town, MA
Lanesborough town, MA
Lee town, MA
Lenox town, MA
Pittsfield city, MA
Richmond town, MA
Stockbridge town, MA

Portland, ME MSA

Cumberland County, ME (part)

Cape Elizabeth town, ME
Casco town, ME
Cumberland town, ME
Falmouth town, ME
Freeport town, ME
Gorham town, ME
Gray town, ME
North Yarmouth town, ME
Portland city, ME
Raymond town, ME
Scarborough town, ME
South Portland city, ME
Standish town, ME
Westbrook city, ME
Windham town, ME
Yarmouth town, ME

York County, ME (part)

Buxton town, ME
Hollis town, ME
Limington town, ME
Old Orchard Beach town, ME

Portland–Vancouver, OR–WA PMSA—see Portland–Salem, OR–WA CMSA

Portland–Salem, OR–WA CMSA

Portland–Vancouver, OR–WA PMSA

Clackamas County, OR
Columbia County, OR
Multnomah County, OR
Washington County, OR
Yamhill County, OR
Clark County, WA

Salem, OR PMSA

Marion County, OR
Polk County, OR

Portsmouth–Rochester, NH–ME PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Providence–Fall River–Warwick, RI–MA MSA

Bristol County, MA (part)
Attleboro city, MA
Fall River city, MA
North Attleborough town, MA
Rehoboth town, MA
Seekonk town, MA
Somerset town, MA
Swansea town, MA
Westport town, MA

Bristol County, RI

Barrington town, RI

Bristol town, RI

Warren town, RI

Kent County, RI

Coventry town, RI
East Greenwich town, RI
Warwick city, RI
West Greenwich town, RI
West Warwick town, RI

Newport County, RI (part)

Jamestown town, RI
Little Compton town, RI
Tiverton town, RI

Providence County, RI

Burrillville town, RI
Central Falls city, RI
Cranston city, RI
Cumberland town, RI
East Providence city, RI

Foster town, RI

Glocester town, RI

Johnston town, RI

Lincoln town, RI

North Providence town, RI

North Smithfield town, RI

Pawtucket city, RI

Providence city, RI

Scituate town, RI

Smithfield town, RI

Woonsocket city, RI

Washington County, RI (part)

Charlestown town, RI

Exeter town, RI

Narragansett town, RI

North Kingstown town, RI

Richmond town, RI

South Kingstown town, RI

Provo–Orem, UT MSA

Utah County, UT

Pueblo, CO MSA

Pueblo County, CO

Punta Gorda, FL MSA

Charlotte County, FL

Racine, WI PMSA—see Milwaukee–Racine, WI CMSA

Raleigh–Durham–Chapel Hill, NC MSA

Chatham County, NC
Durham County, NC
Franklin County, NC
Johnston County, NC
Orange County, NC
Wake County, NC

Rapid City, SD MSA

Pennington County, SD

Reading, PA MSA

Berks County, PA

Redding, CA MSA

Shasta County, CA

Reno, NV MSA

Washoe County, NV

Richland–Kennewick–Pasco, WA MSA

Benton County, WA
Franklin County, WA

Richmond–Petersburg, VA MSA

Charles City County, VA
Chesterfield County, VA
Dinwiddie County, VA
Goochland County, VA
Hanover County, VA
Henrico County, VA
New Kent County, VA
Powhatan County, VA
Prince George County, VA
Colonial Heights city, VA
Hopewell city, VA
Petersburg city, VA
Richmond city, VA

Riverside–San Bernardino, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Roanoke, VA MSA

Botetourt County, VA
Roanoke County, VA
Roanoke city, VA
Salem city, VA

Rochester, MN MSA

Olmsted County, MN

Rochester, NY MSA

Genesee County, NY
Livingston County, NY
Monroe County, NY
Ontario County, NY
Orleans County, NY
Wayne County, NY

Rockford, IL MSA

Boone County, IL
Ogle County, IL
Winnebago County, IL

Rocky Mount, NC MSA

Edgecombe County, NC
Nash County, NC

Sacramento, CA PMSA—see Sacramento–Yolo, CA CMSA

Sacramento–Yolo, CA CMSA

Sacramento, CA PMSA
El Dorado County, CA
Placer County, CA
Sacramento County, CA
Yolo, CA PMSA
Yolo County, CA

Saginaw–Bay City–Midland, MI MSA

Bay County, MI
Midland County, MI
Saginaw County, MI

St. Cloud, MN MSA

Benton County, MN
Stearns County, MN

St. Joseph, MO MSA

Andrew County, MO
Buchanan County, MO

St. Louis, MO–IL MSA

Clinton County, IL
Jersey County, IL
Madison County, IL
Monroe County, IL
St. Clair County, IL
Franklin County, MO
Jefferson County, MO
Lincoln County, MO
St. Charles County, MO
St. Louis County, MO
Warren County, MO
St. Louis city, MO

Salem, OR PMSA—see Portland–Salem, OR–WA CMSA

Salinas, CA MSA

Monterey County, CA

Salt Lake City–Ogden, UT MSA

Davis County, UT
Salt Lake County, UT
Weber County, UT

San Angelo, TX MSA

Tom Green County, TX

San Antonio, TX MSA

Bexar County, TX
Comal County, TX
Guadalupe County, TX
Wilson County, TX

San Diego, CA MSA

San Diego County, CA

San Francisco, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

San Francisco–Oakland–San Jose, CA CMSA

Oakland, CA PMSA
Alameda County, CA
Contra Costa County, CA
San Francisco, CA PMSA
Marin County, CA
San Francisco County, CA
San Mateo County, CA
San Jose, CA PMSA
Santa Clara County, CA
Santa Cruz–Watsonville, CA PMSA
Santa Cruz County, CA
Santa Rosa, CA PMSA
Sonoma County, CA
Vallejo–Fairfield–Napa, CA PMSA
Napa County, CA
Solano County, CA

San Jose, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

San Luis Obispo–Atascadero–Paso Robles, CA MSA

San Luis Obispo County, CA

Santa Barbara–Santa Maria–Lompoc, CA MSA

Santa Barbara County, CA

Santa Cruz–Watsonville, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Santa Fe, NM MSA

Los Alamos County, NM
Santa Fe County, NM

Santa Rosa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Sarasota–Bradenton, FL MSA

Manatee County, FL
Sarasota County, FL

Savannah, GA MSA

Bryan County, GA
Chatham County, GA
Effingham County, GA

Scranton–Wilkes-Barre–Hazleton, PA MSA

Columbia County, PA
Lackawanna County, PA
Luzerne County, PA
Wyoming County, PA

Seattle–Bellevue–Everett, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Seattle–Tacoma–Bremerton, WA CMSA

Bremerton, WA PMSA
Kitsap County, WA
Olympia, WA PMSA
Thurston County, WA
Seattle–Bellevue–Everett, WA PMSA
Island County, WA
King County, WA
Snohomish County, WA
Tacoma, WA PMSA
Pierce County, WA

Sharon, PA MSA

Mercer County, PA

Sheboygan, WI MSA

Sheboygan County, WI

Sherman–Denison, TX MSA

Grayson County, TX

Shreveport–Bossier City, LA MSA

Bossier Parish, LA
Caddo Parish, LA
Webster Parish, LA

Sioux City, IA–NE MSA

Woodbury County, IA
Dakota County, NE

Sioux Falls, SD MSA

Lincoln County, SD
Minnehaha County, SD

South Bend, IN MSA

St. Joseph County, IN

Spokane, WA MSA

Spokane County, WA

Springfield, IL MSA

Menard County, IL
Sangamon County, IL

Springfield, MO MSA

Christian County, MO
Greene County, MO
Webster County, MO

Springfield, MA MSA

Franklin County, MA (part)
Sunderland town, MA
Hampden County, MA (part)
Agawam city, MA
Chicopee city, MA

Springfield, MA MSA—Con.

Hampden County, MA (part)—Con.
 East Longmeadow town, MA
 Hampden town, MA
 Holyoke city, MA
 Longmeadow town, MA
 Ludlow town, MA
 Monson town, MA
 Montgomery town, MA
 Palmer town, MA
 Russell town, MA
 Southwick town, MA
 Springfield city, MA
 Westfield city, MA
 West Springfield town, MA
 Wilbraham town, MA
 Hampshire County, MA (part)
 Amherst town, MA
 Belchertown town, MA
 Easthampton town, MA
 Granby town, MA
 Hadley town, MA
 Hatfield town, MA
 Huntington town, MA
 Northampton city, MA
 Southampton town, MA
 South Hadley town, MA
 Ware town, MA
 Williamsburg town, MA

Stamford–Norwalk, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**State College, PA MSA**
Centre County, PA**Steubenville–Weirton, OH–WV MSA**

Jefferson County, OH
 Brooke County, WV
 Hancock County, WV

Stockton–Lodi, CA MSA
San Joaquin County, CA**Sumter, SC MSA**
Sumter County, SC**Syracuse, NY MSA**
Cayuga County, NY
Madison County, NY
Onondaga County, NY
Oswego County, NY**Tacoma, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA****Tallahassee, FL MSA**
Gadsden County, FL
Leon County, FL**Tampa–St. Petersburg–Clearwater, FL MSA**
Hernando County, FL
Hillsborough County, FL
Pasco County, FL
Pinellas County, FL**Terre Haute, IN MSA**
Clay County, IN
Vermillion County, IN
Vigo County, IN**Texarkana, TX–Texarkana, AR MSA**
Miller County, AR
Bowie County, TX**Toledo, OH MSA**

Fulton County, OH
 Lucas County, OH
 Wood County, OH

Topeka, KS MSA
Shawnee County, KS**Trenton, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****Tucson, AZ MSA**
Pima County, AZ**Tulsa, OK MSA**
Creek County, OK
Osage County, OK
Rogers County, OK
Tulsa County, OK
Wagoner County, OK**Tuscaloosa, AL MSA**
Tuscaloosa County, AL**Tyler, TX MSA**
Smith County, TX**Utica–Rome, NY MSA**
Herkimer County, NY
Oneida County, NY**Vallejo–Fairfield–Napa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA****Ventura, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA****Victoria, TX MSA**
Victoria County, TX**Vineland–Millville–Bridgeton, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Visalia–Tulare–Porterville, CA MSA**
Tulare County, CA**Waco, TX MSA**
McLennan County, TX**Washington, DC–MD–VA–WV PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA****Washington–Baltimore, DC–MD–VA–WV CMSA**
Baltimore, MD PMSA
Anne Arundel County, MD
Baltimore County, MD
Carroll County, MD
Harford County, MD
Howard County, MD
Queen Anne's County, MD
Baltimore city, MD
Hagerstown, MD PMSA
Washington County, MD
Washington, DC–MD–VA–WV PMSA
District of Columbia, DC
Calvert County, MD
Charles County, MD
Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA**Washington–Baltimore, DC–MD–VA–WV CMSA—Con.**

Washington, DC–MD–VA–WV PMSA—Con.
 Fauquier County, VA
 King George County, VA
 Loudoun County, VA
 Prince William County, VA
 Spotsylvania County, VA
 Stafford County, VA
 Warren County, VA
 Alexandria city, VA
 Fairfax city, VA
 Falls Church city, VA
 Fredericksburg city, VA
 Manassas city, VA
 Manassas Park city, VA
 Berkeley County, WV
 Jefferson County, WV

Waterbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Waterloo–Cedar Falls, IA MSA**
Black Hawk County, IA**Wausau, WI MSA**
Marathon County, WI**West Palm Beach–Boca Raton, FL MSA**
Palm Beach County, FL**Wheeling, WV–OH MSA**
Belmont County, OH
Marshall County, WV
Ohio County, WV**Wichita, KS MSA**
Butler County, KS
Harvey County, KS
Sedgwick County, KS**Wichita Falls, TX MSA**
Archer County, TX
Wichita County, TX**Williamsport, PA MSA**
Lycoming County, PA**Wilmington–Newark, DE–MD PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Wilmington, NC MSA**
Brunswick County, NC
New Hanover County, NC**Worcester, MA–CT PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****Yakima, WA MSA**
Yakima County, WA**Yolo, CA PMSA—see Sacramento–Yolo, CA CMSA****York, PA MSA**
York County, PA**Youngstown–Warren, OH MSA**
Columbiana County, OH
Mahoning County, OH
Trumbull County, OH**Yuba City, CA MSA**
Sutter County, CA
Yuba County, CA**Yuma, AZ MSA**
Yuma County, AZ

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

- Printed reports [P]
- CD-ROM [C]
- Highlights online [+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through January 1996) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available March 1996 through May 1996) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available November 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

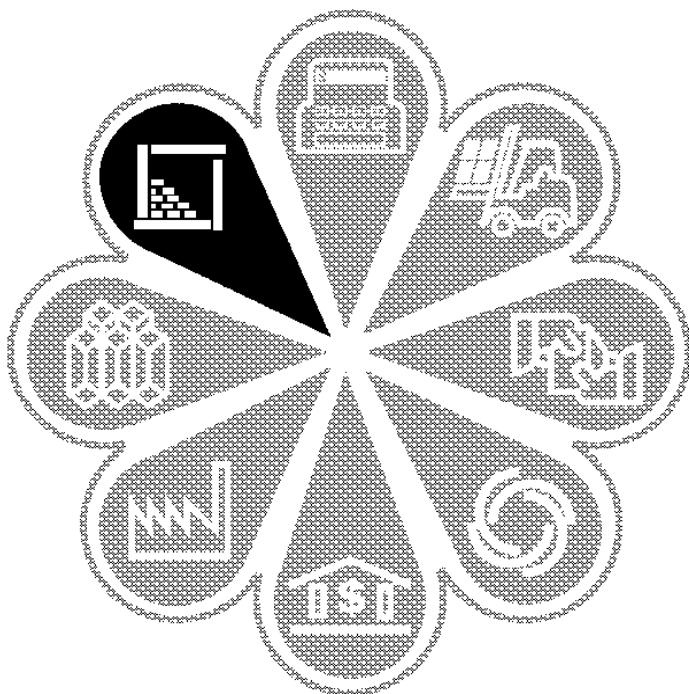
Census of Construction Industries

CC92-A-5

GEOGRAPHIC AREA SERIES

South Atlantic States

Delaware, District of Columbia, Florida,
Georgia, Maryland, North Carolina,
South Carolina, Virginia, West Virginia



Acknowledgments

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Special acknowledgment is also due the many businesses whose cooperation has contributed to the publication of these data.

If you have any questions concerning the statistics in this report, call 301-457-4680.

1992 Census of Construction Industries

CC92-A-5

GEOGRAPHIC AREA SERIES

South Atlantic States

Delaware, District of Columbia, Florida,
Georgia, Maryland, North Carolina,
South Carolina, Virginia, West Virginia

Issued May 1996



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Michael Kantor, Secretary

Economics and Statistics Administration
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BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

IV INTRODUCTION

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

CONSTRUCTION—GEOGRAPHIC AREA SERIES

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Assets and depreciation (gross book value):					
Beginning of year—buildings, machinery, and equipment	4				
End of year—total	2, 4	2	6	7	
End of year—buildings, machinery, and equipment	4				
Depreciation charges during year—buildings, machinery, and equipment	4				
Capital expenditures:					
Total capital expenditures	2, 4	2	6	7	11
New buildings—machinery and equipment	4				
Used buildings—machinery and equipment	4				
Communication services, costs for	3				
Employees:					
All employees—average number	1, 2, 3	2	6	7	11
Construction workers—average number	2, 3, 9	2, 9			
Construction workers—quarterly	3, 9	9			
Other employees—average number	3				
Other employees—quarterly	3				
Establishments:					
Number in business during year:					
All	1				
With payroll	1, 2, 3, 5, 9	2, 9	6	7	11
Without payroll	1				
Fringe benefits—legally required and voluntary expenditures	3				
Inventories	5				
Materials, components, supplies, and fuels—costs for	2, 3	2	6	7	11
Ownership—private or government owned	3				
Payroll:					
First-quarter, all employees	3				
Annual:					
All employees	2, 3	2	6	7	11
Construction workers	2, 3	2			
Other employees	3				
Power, fuels, and lubricants—costs for	3				
Proprietors and working partners:					
All establishments	1				
Establishments with payroll	1, 3				
Establishments without payroll	1				
Ratios, selected industry	10	10			
Receipts and value:					
Dollar value of business done:					
All establishments	1				
Establishments with payroll	1, 3		6	7	
Establishments without payroll	1				
Value of construction work, total	2, 3, 5, 8	2	6	7	11
For work subcontracted in from others	2, 3	2			
Other business receipts	3				

See footnotes at end of table.

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Receipts and value:—Con.					
Net value of construction work.	2, 3	2	6	7	11
Value added.	2, 3	2	6	7	11
Rental costs:					
Total.	2, 3	2	6	7	
For machinery and equipment.	3				
For buildings.	3				
Repairs to buildings and other structures.	3				
Repairs to machinery and equipment.	3				
Subcontract work to others, costs for.	2, 3	2	6	7	11
Type and class of construction ²	8				

Note: Data for 1987 and earlier years are also available in some of these tables.

¹CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan statistical area.

²Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.



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Delaware

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Delaware. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 5,684 establishments in this State operating in the construction industries. These establishments accounted for \$2.0 billion in total dollar value of business done.

Most of the 5,684 construction establishments were small. Of the total, 3,613 were nonemployers, and over half of the employer establishments had less than 5 employees. The 790 construction establishments with 5 employees or more, while representing only 14 percent of all establishments, accounted for more than 82 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$1.83 billion in total dollar value of business done. Of this amount, \$1.80 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$433 million, leaving net value of construction work of \$1.4 billion. In addition, these establishments paid out \$627 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$839 million. (See Introduction and appendixes for explanation of terms.)

There were 2,071 establishments with total employment averaging 17,677 during the year. Total payroll for 1992 was \$445 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 3,613 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$128 million. Most of these establishments, about 77 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

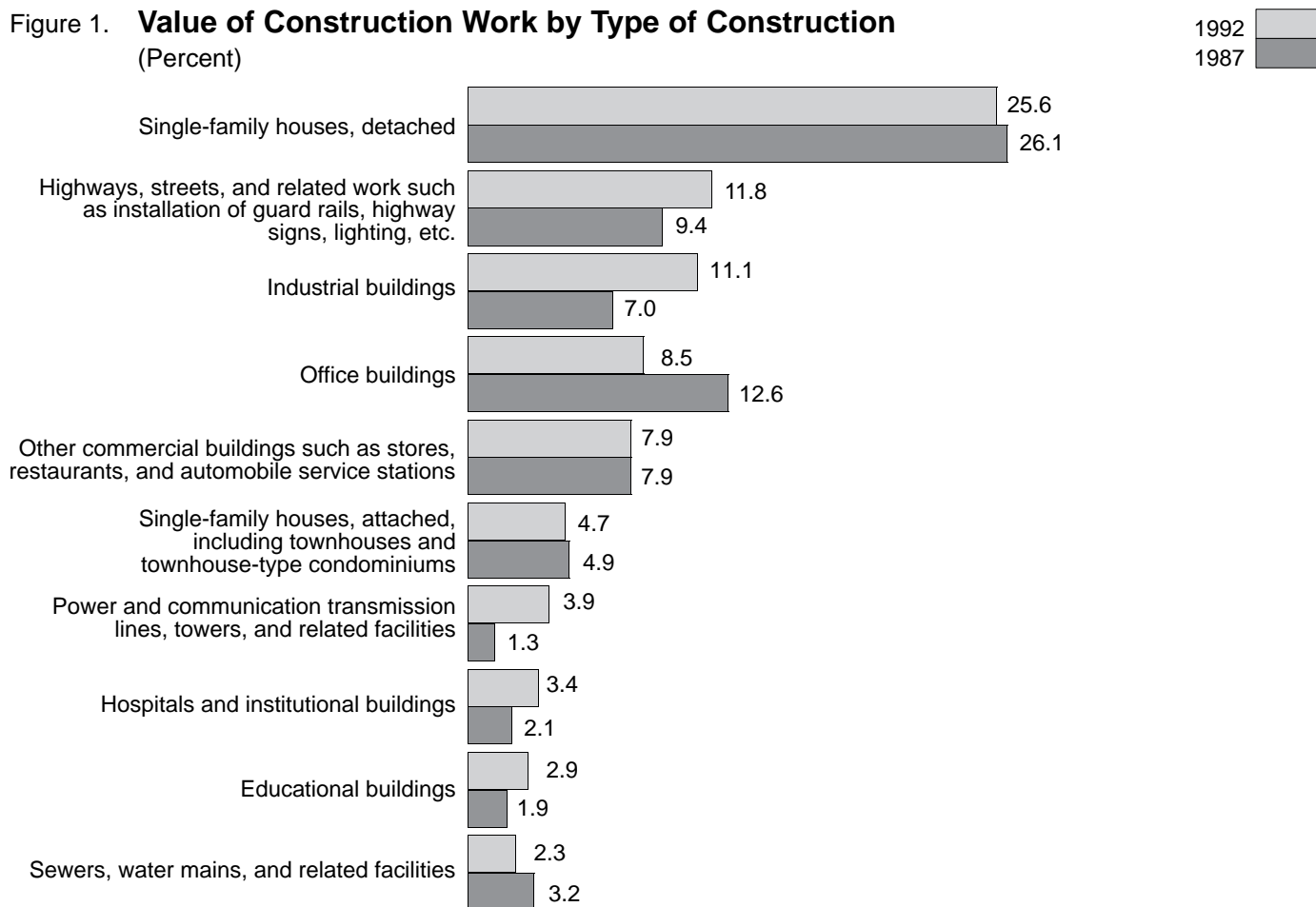


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

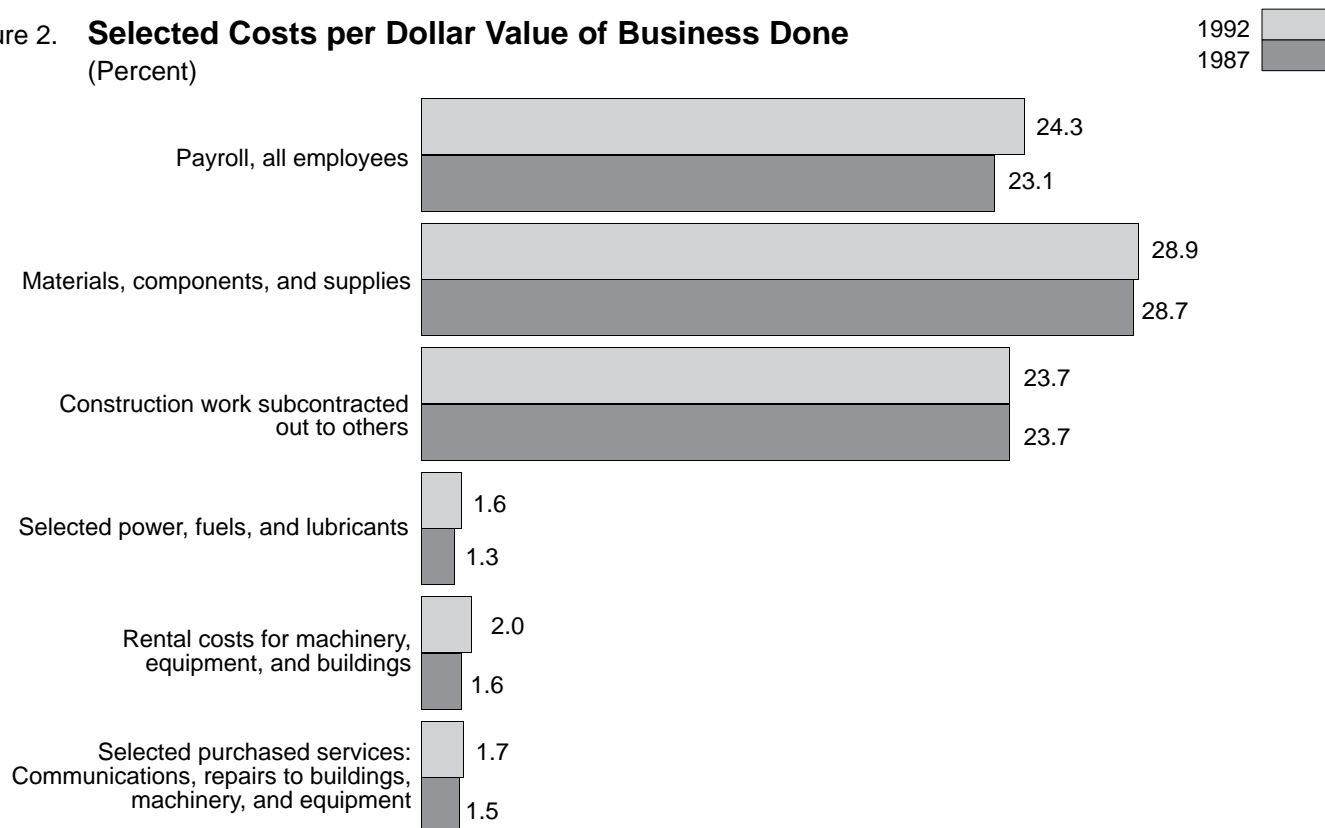


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	5 684	3 918	17 677	1 958 307	3 613	3 327	127 596	2 071	591	17 677	1 830 711	1	2
15	Building construction—General contractors and operative builders ----	1 476	842	4 410	795 700	806	651	51 897	670	191	4 410	743 803	3	4
16	Heavy construction other than building construction—contractors -----	134	41	3 355	379 080	39	35	2 717	95	6	3 355	376 363	2	1
17	Special trade contractors -----	4 074	3 036	9 912	783 527	2 768	2 641	72 982	1 306	395	9 912	710 545	2	2
1711	Plumbing, heating, and air-conditioning --	478	255	2 461	207 658	245	215	8 642	233	(S)	2 461	199 016	6	4
1731	Electrical work -----	415	253	1 554	127 717	234	212	6 258	181	(S)	1 554	121 459	4	2
	1987													
15, 16, 17	Construction industries² -----	5 427	3 788	19 728	2 036 295	3 533	3 406	263 140	1 894	382	19 728	1 773 155	1	2
15	Building construction—General contractors and operative builders ----	1 520	861	5 141	752 041	858	749	90 829	662	112	5 141	661 212	5	4
16	Heavy construction other than building construction—contractors -----	107	27	3 677	332 255	26	26	873	81	1	3 677	331 382	3	2
17	Special trade contractors -----	3 608	2 713	10 835	830 343	2 484	2 451	82 466	1 124	262	10 835	747 877	3	3
1711	Plumbing, heating, and air-conditioning --	451	239	2 658	209 244	194	182	7 353	257	57	2 658	201 891	4	5
1731	Electrical work -----	372	257	1 622	118 074	217	216	9 087	155	41	1 622	108 987	4	6

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	2 071	17 677	13 680	445 084	313 479	1 798 873	1 365 509	839 169
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	458	1 892	1 394	39 533	23 919	202 108	137 883	65 299
1522	Other residential buildings -----	21	217	152	(D)	2 765	15 074	(D)	7 882
1531	Operative builders -----	62	532	255	11 850	4 459	159 524	102 900	60 398
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	30	712	607	23 345	18 165	95 697	48 404	35 048
1542	Nonresidential buildings, n.e.c. -----	99	1 056	711	28 817	15 500	250 909	115 247	70 011
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	30	1 398	1 083	40 362	26 273	193 292	160 517	92 853
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	(S)	*75	52	2 598	1 559	11 913	(D)	5 453
1623	Water, sewer, and utility lines -----	21	1 348	1 143	48 414	38 391	125 057	109 600	78 345
1629	Heavy construction, n.e.c. -----	33	535	450	13 730	11 084	42 984	38 020	28 708
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	233	2 461	1 854	62 626	44 478	196 478	170 518	104 753
1721	Painting and paper hanging -----	128	542	448	9 683	7 248	22 946	20 805	16 449
1731	Electrical work -----	181	1 554	1 196	43 425	32 926	120 683	116 247	71 758
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	137	892	770	17 354	14 474	50 454	48 744	30 750
1742	Plastering, drywall, and insulation work -----	77	619	509	14 999	10 931	40 665	36 700	22 834
1743	Terrazzo, tile, marble, and mosaic work -----	19	51	41	1 418	935	3 849	3 770	2 216
175	Carpentry and floor work:								
1751	Carpentry -----	123	509	431	8 104	6 592	33 190	28 212	15 371
1752	Floor laying and other floor work -----	39	160	123	3 611	2 537	14 327	13 329	6 555
1761	Roofing, siding, and sheet metal work -----	99	757	556	18 435	11 540	52 471	50 135	29 138
1771	Concrete work -----	106	898	766	16 481	12 766	50 932	45 442	28 398
1781	Water well drilling -----	20	79	56	1 727	1 271	6 346	6 065	3 598
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	14	227	167	7 539	5 164	24 392	18 049	10 796
1793	Glass and glazing work -----	32	121	78	2 681	1 638	8 603	8 510	4 693
1794	Excavation work -----	31	237	200	6 305	4 964	26 670	22 836	13 621
1795	Wrecking and demolition work -----	4	*79	*65	(D)	*1 206	*5 137	*4 629	*2 800
1796	Installing building equipment, n.e.c. -----	12	133	92	3 995	3 393	(S)	(S)	(S)
1799	Special trade contractors, n.e.c. -----	51	592	482	12 197	9 301	32 039	29 933	22 109

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
558 178	433 363	452 856	37 100	27 505	307 441	19 728	1 697 841	790 909	1	1	5	15, 16, 17
												15
74 755 (D)	64 225 (D)	6 578 48	938 (S)	2 218 163	21 562 (D)	2 326 510	208 310 48 994	79 387 15 676	8 4	7 (D)	27 (Z)	152 1521 1522
46 811	56 624	*965	1 263	479	3 087	748	143 834	26 149	14	11	27	1531
(D)	47 293	(D)	1 733	(S)	*6 839	427	41 939	15 859	8	11	(S)	154 1541 1542
50 795	135 663	6 945	1 667	795	11 031	1 130	179 836	45 675	5	3	22	1542
												16
(D)	32 775	39 994	9 275	9 226	92 091	1 666	178 818	70 430	3	2	5	1611
(D)	(D)	824	191	546	4 692	*46	(D)	*3 339	40	(D)	31	162 1622
31 372	15 458	14 546	3 371	2 279	39 924	970	(D)	33 831	1	1	2	1623
11 328	4 963	11 082	1 579	1 895	21 199	995	76 811	52 633	5	4	4	1629
												17
68 303	25 960	93 706	4 249	2 166	24 315	2 658	197 689	104 334	6	5	30	1711
4 401	2 141	11 550	291	*370	2 343	462	25 393	19 352	14	12	41	1721
45 265	4 436	63 042	1 516	783	11 586	1 622	108 491	66 166	4	2	38	1731
17 998	1 710	29 034	586	*815	8 256	1 202	61 745	37 803	10	10	40	174 1741
14 611	3 965	35 317	521	369	4 073	863	47 127	28 470	8	5	34	1742
1 554	*79	2 585	40	(S)	(S)	50	(D)	2 731	16	12	(S)	1743
13 214	4 978	11 553	284	604	6 667	437	24 293	13 823	10	16	36	175 1751
6 775	(S)	7 901	(S)	*68	1 111	137	7 517	4 220	20	10	52	1752
21 442	2 336	24 500	885	494	7 931	800	51 477	32 159	7	6	36	1761
17 210	5 491	34 201	2 114	969	9 302	931	80 113	41 206	8	7	24	1771
2 507	*281	1 235	96	80	(S)	133	11 483	6 785	29	35	14	1781
7 366	6 344	17 963	445	333	(D)	314	24 216	17 217	10	3	(Z)	179 1791
(D)	*94	(S)	*158	(D)	126	(D)	(D)	(D)	29	36	(D)	1793
9 468	3 834	15 530	3 694	*1 000	8 554	598	(D)	34 117	9	12	69	1794
*1 829	*508	(D)	*557	59	3 004	(D)	(D)	(D)	57	53	(D)	1795
(S)	565	(S)	(S)	59	1 855	252	18 740	12 284	(Z)	(S)	(Z)	1796
9 810	2 107	8 182	1 239	*409	(D)	349	20 388	13 413	9	9	65	1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	2 071	1 894	1 391	1 583	1	2	4	6
Proprietors and working partners	591	382	371	682	6	12	9	11
All employees**	17 677	19 728	15 618	17 826	1	1	2	2
Construction workers:								
March	12 265	14 182	11 924	13 746	1	2	2	2
May	13 977	15 766	13 880	14 446	1	2	2	2
August	14 449	17 213	13 378	16 146	2	2	2	3
November	14 027	16 456	12 734	14 800	2	2	2	2
Average	13 680	15 904	13 086	14 794	1	2	2	2
Other employees:								
March	3 980	3 837	2 532	3 013	2	3	3	2
May	4 004	3 752	(NA)	(NA)	3	3	(NA)	(NA)
August	4 014	3 881	(NA)	(NA)	2	3	(NA)	(NA)
November	3 992	3 824	(NA)	(NA)	2	3	(NA)	(NA)
Average	3 997	3 824	(NA)	(NA)	2	3	(NA)	(NA)
Payroll, all employees	445 084	409 170	296 027	246 869	1	1	2	1
Payroll, construction workers	313 479	304 509	245 224	194 773	1	1	1	2
Payroll, other employees	131 605	104 660	50 803	52 096	2	2	2	2
First-quarter payroll, all employees	95 832	81 981	67 274	53 966	1	2	1	1
Fringe benefits, all employees	104 792	87 290	55 597	46 592	2	2	2	1
Legally required expenditures	69 261	59 149	36 990	21 666	2	2	2	2
Voluntary expenditures	35 531	28 141	18 607	24 925	2	2	2	1
Dollar value of business done	1 830 711	1 773 155	1 530 449	1 090 402	2	2	1	1
Value of construction work	1 798 873	1 697 841	1 497 170	1 067 681	2	2	1	1
Value of construction work subcontracted in from others	452 856	439 214	233 465	198 204	3	3	11	(Z)
Other business receipts	31 838	45 259	29 281	22 721	5	7	2	12
Net value of construction†	1 365 509	1 277 477	1 065 262	746 787	1	2	1	1
Value added††	839 169	790 909	602 031	402 371	2	2	2	1
Selected costs	991 542	952 191	924 420	681 388	2	2	1	1
Materials, components, and supplies	528 970	509 363	474 638	346 534	2	2	1	1
Construction work subcontracted out to others	433 363	420 364	431 908	320 895	5	3	1	1
Selected power, fuels, and lubricants	29 208	22 463	17 873	13 959	2	2	3	2
Electricity	4 968	3 306	2 369	1 833	4	3	3	4
Natural gas	1 252	491	413	301	6	4	15	14
Gasoline and diesel fuel	21 107	17 327	14 038	8 238	2	2	3	3
On highway use	15 805	13 824	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use	5 302	3 503	(NA)	(NA)	2	3	(NA)	(NA)
Other, including lubricating oils and greases	1 881	1 337	1 052	3 587	4	6	7	2
Rental cost for machinery, equipment, and buildings	37 100	27 577	15 132	8 508	3	2	2	1
For machinery and equipment	26 709	20 713	9 973	7 202	3	2	2	1
For buildings	10 391	6 864	5 159	1 306	8	6	3	5
Selected purchased services	31 747	26 350	17 106	11 970	2	3	3	2
Communication services	8 528	5 333	3 935	3 131	4	3	4	3
Repairs to buildings and other structures	1 918	1 747	1 219	1 093	13	6	4	6
Repairs to machinery and equipment	21 301	19 269	11 952	7 747	2	4	4	2
Ownership of construction projects:								
Value of construction work	1 798 873	1 697 841	1 497 170	1 067 681	2	2	1	1
Government owned	379 469	296 443	246 454	148 733	3	5	6	1
Federal	55 067	53 859	(NA)	(NA)	14	10	(NA)	(NA)
State and local	324 402	242 584	(NA)	(NA)	2	6	(NA)	(NA)
Privately owned	1 419 404	1 401 397	1 250 716	918 948	3	2	2	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	295 723	228 947	3	5
Capital expenditures, other than land -----	27 505	43 290	5	5
New -----	17 913	36 509	6	4
Used -----	9 592	6 780	10	20
Retirements and disposition of depreciable assets -----	15 787	13 292	6	24
End-of-year gross book value of depreciable assets -----	307 441	258 945	3	4
Depreciation charges during year-----	31 619	29 763	4	5
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	34 044	49 021	6	11
Capital expenditures, other than land -----	2 062	7 792	30	10
New buildings and other structures -----	752	5 809	5	6
Used buildings and other structures -----	* 1 310	1 982	47	34
Retirements and disposition of depreciable assets -----	1 362	* 4 261	12	64
End-of-year gross book value of depreciable assets -----	34 743	52 553	6	9
Depreciation charges during year-----	3 235	4 113	9	7
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	261 680	179 925	3	4
Capital expenditures, other than land -----	25 443	35 497	5	5
New machinery and equipment, including automobiles and trucks -----	17 161	30 699	7	4
New automobiles and trucks, intended primarily for highway use -----	5 908	14 746	9	6
Used machinery and equipment, including automobiles and trucks -----	8 282	4 797	8	19
Retirements and disposition of depreciable assets -----	14 424	9 030	7	18
End-of-year gross book value of depreciable assets -----	272 698	206 392	3	4
Depreciation charges during year-----	28 383	25 650	4	5

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	2 071	1
Value of construction work	1 798 873	2
Establishments with inventories:		
Number	586	5
Value of construction work	680 420	2
Inventories ¹ :		
End of 1992, materials and supplies	14 322	17
End of 1991, materials and supplies	11 445	7
Establishments with no inventories:		
Number	715	5
Value of construction work	626 172	5
Establishments not reporting:		
Number	770	4
Value of construction work	492 281	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	2 071	(S)	357	238	148	33	10	4	—	—	
All employees** -----	17 677	2 542	2 335	3 121	4 509	2 208	1 356	1 607	—	—	
Payroll, all employees -----	445 084	39 272	47 407	72 605	124 739	68 756	35 624	56 681	—	—	
Dollar value of business done -----	1 830 711	221 249	198 174	280 657	596 183	233 048	112 807	188 593	—	—	
Value of construction work -----	1 798 873	219 805	196 341	274 997	581 584	227 773	109 796	188 577	—	—	
Net value of construction work† -----	1 365 509	179 293	144 124	219 829	390 788	188 955	90 365	152 156	—	—	
Value added†† -----	839 169	104 303	86 209	135 825	236 527	123 022	61 452	91 831	—	—	
Cost of materials, components, supplies, and fuels -----	558 178	76 434	59 747	89 664	168 860	71 208	31 924	60 341	—	—	
Cost of construction work subcontracted out to others -----	433 363	40 512	52 218	55 168	190 796	38 818	19 431	36 421	—	—	
Rental cost for machinery, equipment, and buildings -----	37 100	2 151	1 865	5 567	10 109	4 811	5 088	7 510	—	—	
Capital expenditures, other than land -----	27 505	3 345	2 570	4 906	5 676	1 673	9 335	(D)	—	—	
End-of-year gross book value of depreciable assets -----	307 441	(S)	24 503	49 397	58 904	50 287	97 224	(D)	—	—	
1987											
All employees** -----	19 728	(S)	2 533	3 849	4 599	2 920	2 174	1 678	(D)	—	
Value of construction work -----	1 697 841	(S)	222 968	288 652	421 709	282 755	328 286	(D)	(D)	—	
Value added†† -----	790 909	(S)	106 527	131 560	182 175	132 546	97 075	72 004	(D)	—	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	7	9	8	3	(Z)	(Z)	(Z)	—	—	
Net value of construction work† -----	1	7	10	6	3	(Z)	(Z)	(Z)	—	—	
Capital expenditures, other than land -----	5	17	25	21	10	(Z)	(Z)	(D)	—	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	2 071	(S)	(S)	(S)	584	332	235	193	78	33	33
All employees** -----	17 677	(S)	(S)	(S)	1 642	1 812	2 345	3 341	2 404	1 777	3 497
Payroll, all employees -----	445 084	(S)	(S)	(S)	23 357	33 349	49 371	83 198	62 957	58 058	125 899
Dollar value of business done -----	1 830 711	(S)	(S)	(S)	90 602	120 219	173 362	288 411	250 327	231 388	643 641
Value of construction work -----	1 798 873	(S)	(S)	(S)	90 198	119 880	169 113	283 952	245 615	228 762	628 714
Net value of construction work† -----	1 365 509	(S)	(S)	(S)	82 482	108 803	140 356	220 133	177 996	184 285	421 425
Value added†† -----	839 169	(S)	(S)	(S)	47 674	64 415	84 924	128 859	114 456	112 757	267 108
Cost of materials, components, supplies, and fuels -----	558 178	(S)	(S)	(S)	35 212	44 726	59 680	95 733	68 252	74 154	169 244
Cost of construction work subcontracted out to others -----	433 363	(S)	(S)	(S)	7 716	11 077	28 757	63 819	67 619	44 477	207 289
Rental cost for machinery, equipment, and buildings -----	37 100	(S)	(S)	(S)	(S)	1 635	3 853	4 559	4 780	6 653	14 163
Capital expenditures, other than land -----	27 505	(S)	(S)	(S)	2 059	2 575	1 411	6 224	2 664	1 953	10 113
End-of-year gross book value of depreciable assets -----	307 441	(S)	(S)	(S)	15 315	18 411	21 387	50 658	39 914	40 059	116 758
1987											
All employees** -----	19 728	(S)	(S)	(S)	(S)	(S)	(S)	4 105	2 615	2 295	3 889
Value of construction work -----	1 697 841	(S)	(S)	(S)	(S)	(S)	(S)	313 265	239 988	247 890	524 157
Value added†† -----	790 909	(S)	(S)	(S)	(S)	(S)	(S)	159 256	105 679	128 353	196 297
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	(S)	10	9	10	5	3	(Z)	1
Net value of construction work† -----	1	(S)	(S)	(S)	9	10	10	6	3	(Z)	3
Capital expenditures, other than land -----	5	(S)	(S)	(S)	26	24	22	18	6	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

DE-10 DELAWARE

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 798 873	1 031 752	411 484	293 866	2	3	3	3
Building construction	1 292 822	811 366	297 477	183 978	3	3	4	5
Single-family houses	545 883	397 096	93 443	55 345	5	6	10	8
Single-family houses, detached	460 858	334 499	79 582	46 778	5	7	10	10
Single-family houses, attached, including townhouses and townhouse-type condominiums	85 025	62 597	13 861	8 567	14	17	24	13
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	37 987	16 666	(S)	(S)	5	6	(S)	(S)
Other residential buildings, including hotels, motels, and tourist cabins	10 141	3 864	4 316	1 962	11	11	16	13
Office buildings	153 653	73 096	52 599	27 959	6	6	9	8
Other commercial buildings such as stores, restaurants, and automobile service stations	142 453	81 064	29 828	31 561	4	4	5	11
Industrial buildings and warehouses	236 103	137 629	60 925	37 549	5	6	6	6
Industrial buildings	199 933	113 469	54 830	31 635	3	4	5	5
Warehouses	36 169	24 160	6 095	5 914	17	16	26	12
Educational buildings	52 177	(S)	14 508	3 946	2	(S)	7	7
Hospitals and institutional buildings	60 398	(D)	(D)	(D)	2	(D)	(D)	(D)
Farm buildings, nonresidential	9 517	(D)	(D)	(D)	17	(D)	(D)	(D)
Other nonresidential buildings	44 509	(D)	(D)	(D)	16	(D)	(D)	(D)
Nonbuilding construction	444 280	220 385	114 007	109 888	1	2	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	212 177	104 545	70 645	36 987	2	2	2	6
Private driveways and parking areas	11 942	(D)	(D)	(D)	25	(D)	(D)	(D)
Power and communication transmission lines, towers, and related facilities	69 636	(D)	(D)	(Z)	(D)	(D)	(D)	(D)
Sewers, water mains, and related facilities	40 694	25 495	11 475	3 723	2	4	4	4
Sewers, sewer lines, septic systems, and related facilities	24 020	15 612	6 376	2 031	3	4	1	4
Water mains and related facilities	16 674	9 883	5 099	1 692	3	3	9	5
Pipeline construction other than sewer or water lines	20 803	10 993	3 812	5 998	6	(Z)	(Z)	22
Blast furnaces, petroleum refineries, chemical complexes, etc.	26 083	7 609	5 776	12 698	4	1	20	1
Power plants	18 862	(D)	(D)	9 654	(Z)	(D)	(D)	(Z)
Sewage treatment and water treatment plants	8 564	7 016	1 317	*230	11	7	28	55
Other nonbuilding construction	35 519	(D)	(D)	(D)	8	(D)	(D)	(D)
Construction work, n.s.k.	61 771	(NA)	(NA)	(NA)	13	(NA)	(NA)	(NA)
1987								
Value of construction work	1 697 841	1 106 636	303 684	215 447	2	2	3	3
Building construction	1 231 467	898 269	219 707	113 489	2	3	4	5
Single-family houses	526 704	424 966	59 553	42 184	4	5	12	11
Single-family houses, detached	442 918	352 223	54 737	35 957	5	6	13	12
Single-family houses, attached, including townhouses and townhouse-type condominiums	83 785	72 742	4 815	6 227	8	8	16	20
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	59 180	49 746	4 923	4 510	6	7	20	27
Other residential buildings, including hotels, motels, and tourist cabins	42 059	25 128	13 632	3 298	12	13	22	19
Office buildings	213 543	143 932	52 871	16 739	5	8	6	7
Other commercial buildings such as stores, restaurants, and automobile service stations	133 943	98 868	21 511	13 563	4	4	12	15
Industrial buildings and warehouses	158 663	103 946	34 517	20 198	2	2	3	5
Industrial buildings	119 597	74 522	28 750	16 324	2	3	4	5
Warehouses	39 065	29 424	5 767	3 874	2	2	5	14
Educational buildings	32 388	12 915	13 486	5 987	5	3	6	20
Hospitals and institutional buildings	36 010	23 340	10 713	1 956	2	1	3	7
Other nonresidential buildings	28 977	15 428	8 501	5 054	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	394 300	208 366	83 976	101 957	2	3	4	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	160 420	81 033	55 907	23 480	3	2	6	3
Private driveways and parking areas	20 048	12 440	6 018	1 588	8	10	6	16
Power and communication transmission lines, towers, and related facilities	22 887	(D)	(D)	6 356	5	(D)	(D)	5
Sewers, water mains, and related facilities	54 627	32 696	3 281	18 649	4	3	8	3
Sewers, sewer lines, septic systems, and related facilities	19 543	16 617	(D)	(D)	5	3	(D)	(D)
Water mains and related facilities	35 084	16 078	(D)	(D)	3	3	(D)	(D)
Pipeline construction other than sewer or water lines	17 877	16 472	(D)	(D)	(Z)	(Z)	(D)	(D)
Blast furnaces, petroleum refineries, chemical complexes, etc.	13 001	(D)	(D)	(D)	(Z)	(D)	(D)	(D)
Power plants	41 861	(D)	(D)	(D)	(Z)	(D)	(D)	(D)
Sewage treatment and water treatment plants	13 750	11 225	(D)	(D)	(Z)	(Z)	(D)	(D)
Other nonbuilding construction	49 829	38 758	4 692	6 347	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	72 073	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(Z)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	2 071	13 680	12 265	13 977	14 449	14 027	1	1	1	1	2	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	458	1 394	1 286	1 401	1 537	1 354	6	8	7	8	9	10
1522	Other residential buildings -----	21	152	150	154	166	136	27	4	(Z)	4	10	(Z)
1531	Operative builders -----	62	255	215	253	280	271	20	14	10	11	15	17
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	30	607	606	500	551	772	36	5	5	6	7	6
1542	Nonresidential buildings, n.e.c. ----	99	711	592	1 016	633	605	16	5	5	3	6	6
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	30	1 083	534	1 224	1 404	1 171	12	3	4	4	4	2
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	(S) 21	52	34	48	52	75	(S) 8	29	22	31	29	30
1623	Water, sewer, and utility lines -----	21	1 143	1 193	1 085	1 138	1 157	1	1	1	1	1	1
1629	Heavy construction, n.e.c. -----	33	450	430	443	443	485	17	5	3	5	5	5
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	233	1 854	1 699	1 788	1 965	1 964	8	6	4	6	7	7
1721	Painting and paper hanging -----	128	448	372	461	534	424	10	14	10	14	16	12
1731	Electrical work -----	181	1 196	1 191	1 182	1 261	1 150	5	4	5	4	4	4
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	137	770	725	789	795	769	5	10	9	9	11	14
1742	Plastering, drywall, and insulation work -----	77	509	563	486	487	501	11	8	11	8	11	10
1743	Terrazzo, tile, marble, and mosaic work -----	19	41	40	41	42	39	30	14	14	14	14	15
175	Carpentry and floor work:												
1751	Carpentry -----	123	431	389	459	(S) 132	444	12	11	11	10	(S) 22	10
1752	Floor laying and other floor work --	39	123	119	114		125	15	23	21	22		24
1761	Roofing, siding, and sheet metal work -----	99	556	510	577	564	571	16	8	8	7	8	8
1771	Concrete work -----	106	766	642	792	883	747	11	9	11	9	9	10
1781	Water well drilling -----	20	56	50	65	59	51	37	28	31	35	26	31
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	14	167	146	166	188	167	30	10	9	8	16	8
1793	Glass and glazing work -----	32	78	53	78	83	*98	34	31	22	31	31	40
1794	Excavation work -----	31	200	166	214	193	227	11	8	2	10	11	7
1795	Wrecking and demolition work -----	4	*65	*60	*62	*69	*68	35	55	56	56	59	53
1796	Installing building equipment, n.e.c. -----	12	92	73	91	81	121	(Z) 20	(Z) 8	(Z) 10	(Z) 9	(Z) 9	(Z) 6
1799	Special trade contractors, n.e.c. ----	51	482	427	488	480	535						

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.5	25.2	131.5	.247	.310	.241	.252	.021
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.1	20.9	145.0	.196	.370	.318	.033	.005
1522	Other residential buildings -----	10.3	(D)	99.2	(D)	(D)	(D)	.003	(S)
1531	Operative builders -----	8.5	22.3	625.6	.074	.293	.355	*.006	.008
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	23.6	32.8	157.7	.244	(D)	.494	(D)	.018
1542	Nonresidential buildings, n.e.c. -----	10.7	27.3	352.9	.115	.202	.541	.028	.007
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	46.2	28.9	178.5	.209	(D)	.170	.207	.048
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	7.5	34.6	229.1	.218	(D)	(D)	.069	.016
1623	Water, sewer, and utility lines -----	63.7	35.9	109.4	.387	.251	.124	.116	.027
1629	Heavy construction, n.e.c. -----	16.0	25.7	95.5	.319	.264	.115	.258	.037
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	10.6	25.4	106.0	.319	.348	.132	.477	.022
1721	Painting and paper hanging -----	4.2	17.9	51.2	.422	.192	.093	.503	.013
1731	Electrical work -----	8.6	27.9	100.9	.360	.375	.037	.522	.013
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6.5	19.5	65.5	.344	.357	.034	.575	.012
1742	Plastering, drywall, and insulation work -----	8.1	24.2	79.9	.369	.359	.098	.868	.013
1743	Terrazzo, tile, marble, and mosaic work -----	2.7	27.8	93.9	.368	.404	*.021	.672	.010
175	Carpentry and floor work:								
1751	Carpentry -----	4.2	15.9	77.0	.244	.398	.150	.348	.009
1752	Floor laying and other floor work -----	4.1	22.6	116.5	.252	.473	(S)	.551	(S)
1761	Roofing, siding, and sheet metal work -----	7.6	24.4	94.4	.351	.409	.045	.467	.017
1771	Concrete work -----	8.5	18.4	66.5	.324	.338	.108	.671	.042
1781	Water well drilling -----	4.0	21.9	113.3	.272	.395	.044	*.195	*.015
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	15.8	33.2	146.1	.309	.302	.260	.736	.018
1793	Glass and glazing work -----	3.8	22.2	110.3	.312	(D)	*.011	(S)	*.018
1794	Excavation work -----	7.6	26.6	133.4	.236	.355	.144	.582	.139
1795	Wrecking and demolition work -----	22.3	(D)	79.0	(D)	.356	.099	(D)	.108
1796	Installing building equipment, n.e.c. -----	11.1	30.0	(S)	(S)	(S)	(S)	(S)	(S)
1799	Special trade contractors, n.e.c. -----	11.6	20.6	66.5	.381	.306	.066	.255	.039

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA											
15,16, 17	Construction industries	13 010	105 943	3 072 558	12 663 461	9 443 230	6 052 455	3 736 651	3 220 232	163 018	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	2 309	8 868	182 063	1 032 402	732 371	377 108	369 480	300 031	7 495	3	4
1522	Other residential buildings	97	1 003	29 588	139 771	82 251	57 972	27 975	57 520	499	13	10
1531	Operative builders	366	2 767	77 295	985 023	632 627	419 108	278 463	352 396	5 653	4	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	165	2 943	100 243	449 964	246 674	194 050	61 968	203 290	3 201	5	7
1542	Nonresidential buildings, n.e.c.	589	7 924	272 380	2 114 457	746 560	474 380	373 287	1 367 897	6 458	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	175	4 978	161 333	787 298	643 901	401 973	274 208	143 396	25 540	2	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	25	437	21 230	99 544	63 031	47 054	17 364	36 513	939	7	4
1623	Water, sewer, and utility lines	168	5 868	211 645	587 661	525 255	389 636	138 175	62 406	21 085	2	2
1629	Heavy construction, n.e.c.	226	3 526	126 055	527 677	419 197	285 302	150 112	108 480	16 971	5	3
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 828	16 046	510 888	1 681 450	1 441 079	849 431	629 554	240 371	17 100	2	2
1721	Painting and paper hanging	736	3 720	83 383	215 610	202 389	147 992	54 856	13 221	2 282	5	3
1731	Electrical work	1 346	11 310	372 617	1 078 973	1 036 199	670 112	381 387	42 774	12 375	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	639	4 460	110 528	307 555	292 198	194 808	97 827	15 357	3 402	4	4
1742	Plastering, drywall, and insulation work	281	2 746	76 553	221 158	199 875	129 583	73 567	21 284	1 451	4	5
1743	Terrazzo, tile, marble, and mosaic work	135	689	21 628	66 679	(D)	38 736	23 791	(D)	613	6	(D)
175	Carpentry and floor work:											
1751	Carpentry	986	4 346	93 612	361 174	289 994	173 571	118 488	71 180	3 280	5	7
1752	Floor laying and other floor work ..	263	1 166	28 190	114 342	104 567	53 392	56 511	9 775	999	7	5
1761	Roofing, siding, and sheet metal work	761	4 776	122 776	422 154	385 206	240 706	147 007	36 948	3 285	4	4
1771	Concrete work	672	4 801	112 339	391 724	354 987	211 219	147 824	36 738	7 322	4	4
1781	Water well drilling	45	316	8 685	30 873	(D)	17 797	9 789	(D)	432	7	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	89	1 974	51 920	158 925	138 188	93 524	48 807	20 737	2 078	2	2
1793	Glass and glazing work	110	866	24 974	91 016	86 079	49 478	41 391	4 937	307	9	8
1794	Excavation work	327	1 758	47 872	178 380	152 688	101 472	54 614	25 692	6 055	5	5
1795	Wrecking and demolition work	22	509	14 647	48 788	46 464	37 872	11 275	2 323	994	9	6
1796	Installing building equipment, n.e.c. -	83	2 518	78 817	210 002	199 795	159 027	45 521	10 207	1 938	2	2
1799	Special trade contractors, n.e.c.	568	5 628	131 296	360 864	331 742	237 151	103 409	29 121	11 264	4	4
	Atlantic–Cape May, NJ PMSA											
15,16, 17	Construction industries	1 032	6 001	176 618	722 675	591 515	367 391	239 927	131 160	7 973	2	2
	(See appropriate State for SIC detail.)											
	Philadelphia, PA–NJ PMSA											
15,16, 17	Construction industries	10 203	84 254	2 477 200	10 256 615	7 564 572	4 872 495	2 991 358	2 692 042	128 446	1	1
	(See appropriate State for SIC detail.)											
	Vineland–Millville–Bridgeton, NJ PMSA											
15,16, 17	Construction industries	311	1 891	52 851	224 524	178 191	115 784	65 657	46 332	(S)	4	3
	(See appropriate State for SIC detail.)											

DE–14 DELAWARE

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.											
	Wilmington–Newark, DE–MD PMSA											
15,16, 17	Construction industries	1 464	13 797	365 890	1 459 648	1 108 951	696 784	439 709	350 697	23 149	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	296	1 214	27 177	121 935	89 414	48 571	41 548	32 521	1 314	11	9
1522	Other residential buildings	(S)	202	4 422	(S)	(D)	(D)	(S)	(D)	(D)	(Z)	(D)
1531	Operative builders	47	507	11 133	144 770	94 402	59 705	39 234	50 368	(D)	14	11
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	30	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c.	72	794	23 039	203 477	94 361	54 623	(S)	109 115	548	6	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	30	1 303	37 728	179 828	149 559	85 812	64 069	30 270	8 752	3	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	19	1 244	45 234	112 877	99 515	74 796	24 812	13 363	2 099	1	1
1629	Heavy construction, n.e.c.	(S)	193	4 742	(D)	(D)	10 047	(D)	(D)	1 011	7	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	147	1 887	50 829	157 469	133 626	86 043	50 682	23 843	1 772	4	3
1721	Painting and paper hanging	104	467	8 760	20 765	19 312	15 402	3 964	1 453	(D)	16	12
1731	Electrical work	130	1 109	33 385	95 624	92 268	57 801	35 219	3 356	546	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	80	647	14 531	39 281	38 343	25 082	13 260	938	832	11	12
1742	Plastering, drywall, and insulation work	(S)	383	8 944	24 035	21 858	13 223	9 380	2 177	(D)	11	8
1743	Terrazzo, tile, marble, and mosaic work	13	(D)	1 460	(D)	(D)	2 441	1 656	(S)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	467	7 415	(S)	(S)	(S)	(S)	3 883	(S)	10	(S)
1752	Floor laying and other floor work	(S)	134	3 212	13 869	(D)	5 820	(S)	(D)	(D)	22	(D)
1761	Roofing, siding, and sheet metal work	74	589	16 187	44 340	42 507	25 595	17 318	1 833	392	7	7
1771	Concrete work	96	680	12 696	38 095	34 086	21 257	12 991	4 009	742	9	7
1781	Water well drilling	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	15	(D)	(D)	25 166	(D)	(D)	(D)	(D)	333	(D)	(D)
1793	Glass and glazing work	*19	(D)	(D)	*5 363	(D)	*2 971	*2 871	(D)	—	(D)	(D)
1794	Excavation work	(S)	271	7 236	31 323	26 448	14 299	12 307	4 875	*1 215	8	10
1795	Wrecking and demolition work	*3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	6	(D)	1 639	(D)	(D)	(D)	1 448	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	(S)	437	9 951	26 752	25 410	17 751	8 335	1 342	421	12	9

Contents

District of Columbia

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for District of Columbia. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 1,137 establishments in the District operating in the construction industries. These establishments accounted for \$1.0 billion in total dollar value of business done.

Most of the 1,137 construction establishments were small. Of the total, 804 were nonemployers, and over half of the employer establishments had less than 5 employees. The 181 construction establishments with 5 employees or more, while representing only 16 percent of all establishments, accounted for more than 95 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$1.03 billion in total dollar value of business done. Of this amount, \$1.02 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$460 million, leaving net value of construction work of \$558 million. In addition, these establishments paid out \$243 million for the cost of

materials, fuels, power, rental of equipment and buildings, and the cost of selected purchased services. Value added for 1992 was \$351 million. (See Introduction and appendixes for explanation of terms.)

There were 333 establishments with total employment averaging 6,954 during the year. Total payroll for 1992 was \$215 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 804 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$18 million. Most of these establishments, about 81 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

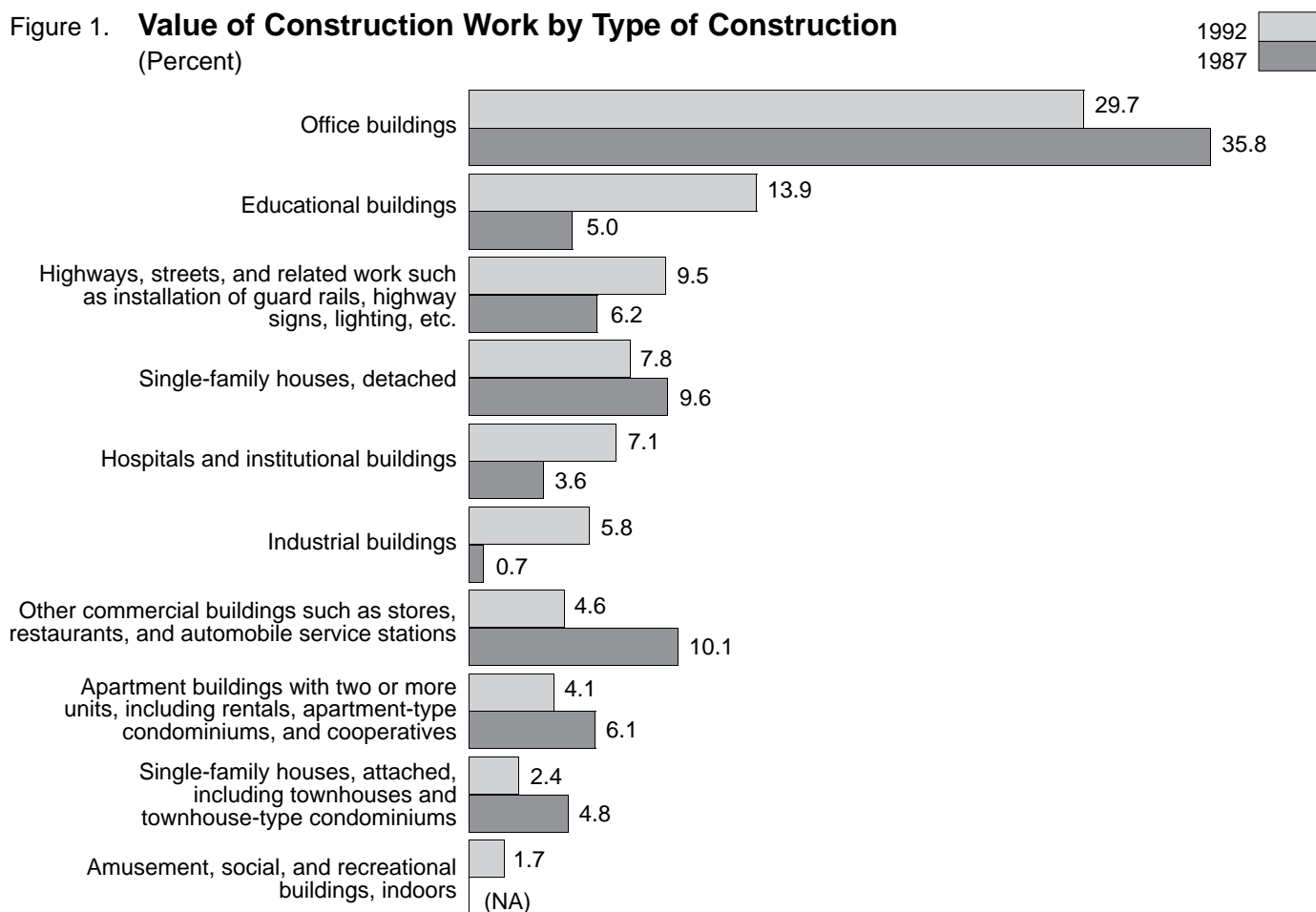


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

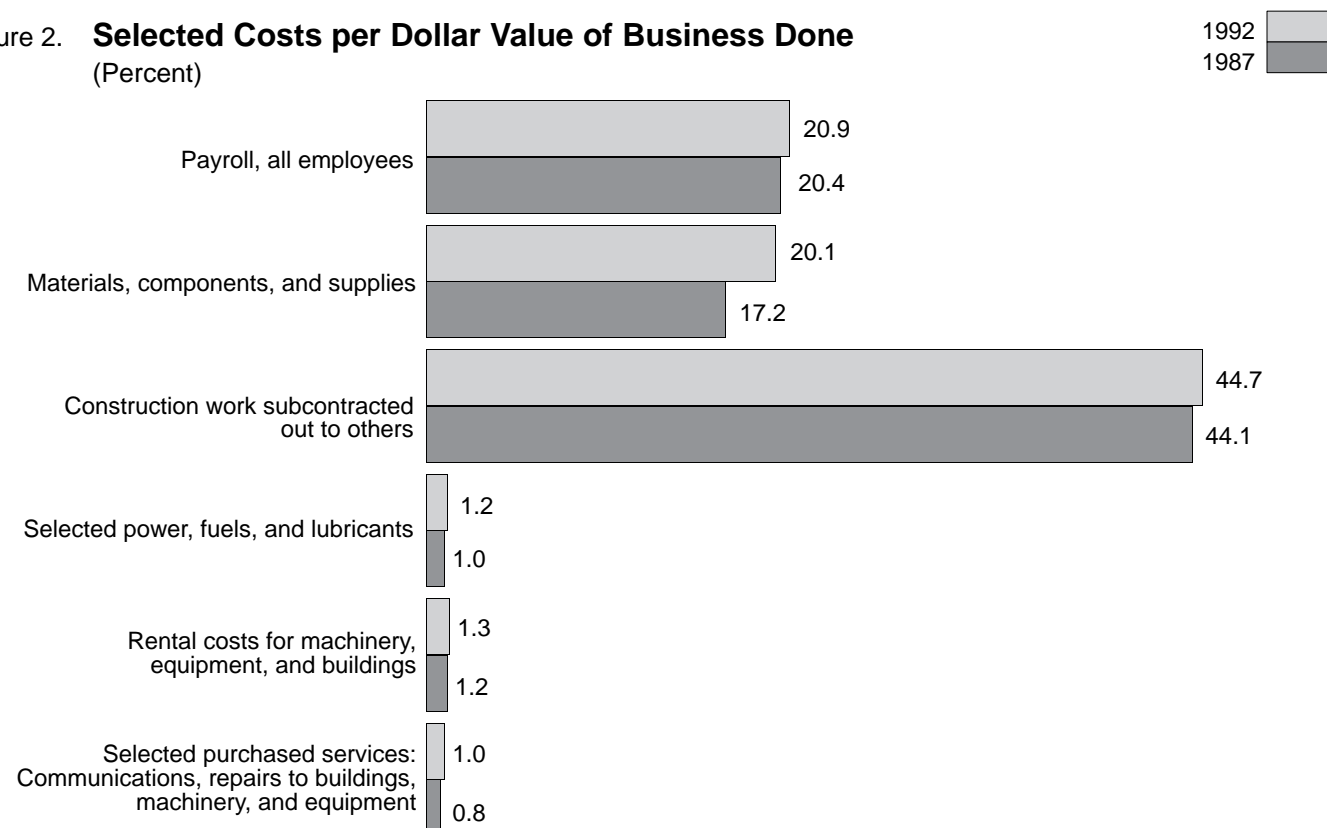


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	1 137	824	6 954	1 048 108	804	764	18 372	333	60	6 954	1 029 736	3	2
15	Building construction—General contractors and operative builders ----	297	150	3 047	662 193	146	128	6 783	151	(S)	3 047	655 410	6	3
16	Heavy construction other than building construction— contractors-----	27	6	1 035	138 125	5	4	44	22	2	1 035	138 081	6	5
17	Special trade contractors -----	813	668	2 872	247 790	653	632	11 545	160	36	2 872	236 245	2	1
1711	Plumbing, heating, and air-conditioning --	83	42	1 250	108 829	44	42	1 021	39	—	1 250	107 808	4	2
1731	Electrical work-----	79	63	355	33 599	49	47	1 337	30	16	355	32 262	10	6
	1987													
15, 16, 17	Construction industries² -----	1 313	885	11 222	1 520 730	904	853	122 834	409	32	11 222	1 397 896	2	2
15	Building construction—General contractors and operative builders ----	357	160	4 296	898 730	198	156	26 530	159	4	4 296	872 200	3	2
16	Heavy construction other than building construction— contractors-----	29	6	(D)	(D)	4	4	48	25	2	(D)	(D)	(D)	(D)
17	Special trade contractors -----	824	637	(D)	(D)	623	611	14 012	201	26	(D)	(D)	(D)	(D)
1711	Plumbing, heating, and air-conditioning --	81	38	1 172	95 574	33	33	1 082	48	5	1 172	94 492	3	2
1731	Electrical work-----	82	47	1 629	123 793	44	42	962	38	5	1 629	122 831	3	3

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	333	6 954	5 212	215 031	141 583	1 018 172	558 322	350 594
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	62	416	307	8 222	5 104	36 375	26 597	17 298
1522	Other residential buildings -----	*13	*50	*39	505	324	2 229	1 992	1 647
1531	Operative builders -----	12	234	111	7 919	3 254	39 666	24 822	14 120
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	*4	(D)	(S)	(D)	(S)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c. -----	61	2 274	1 615	72 687	41 919	549 125	171 232	108 400
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	10	721	590	26 298	17 299	98 294	75 782	39 438
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines -----	*6	164	143	*3 380	*2 704	*9 768	*8 249	4 489
1629	Heavy construction, n.e.c. -----	6	150	103	6 075	3 849	(D)	(D)	(D)
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	39	1 250	957	40 881	30 501	106 382	95 994	62 247
1721	Painting and paper hanging -----	16	243	208	(D)	4 823	15 447	(D)	10 933
1731	Electrical work -----	30	355	256	10 946	6 973	32 262	31 851	20 236
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	8	58	46	*1 605	*1 268	3 313	3 199	*2 467
1742	Plastering, drywall, and insulation work -----	4	94	81	2 936	1 881	5 464	4 893	3 175
1743	Terrazzo, tile, marble, and mosaic work -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:								
1751	Carpentry -----	15	70	56	1 425	(S)	(S)	3 046	1 943
1752	Floor laying and other floor work -----	7	66	47	1 461	865	4 924	3 925	(D)
1761	Roofing, siding, and sheet metal work -----	8	319	290	(D)	(D)	(D)	(D)	(D)
1771	Concrete work -----	*12	(D)	166	(D)	(D)	(D)	(D)	(D)
1781	Water well drilling -----	—	—	—	—	—	—	—	—
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	—	—	—	—	—	—	—	—
1793	Glass and glazing work -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work -----	*10	60	49	2 069	1 515	10 093	8 893	6 440
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	3	(D)	64	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c. -----	3	(D)	(D)	(D)	106	(D)	(D)	(D)

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
219 292	459 850	190 626	13 730	5 461	80 658	11 222	1 351 297	500 280	3	2	3	15, 16, 17
												15
10 166 *345	9 777 *237	*1 756 23	233 3	(S) —	1 572 (S)	231 (S)	22 611 (S)	7 955 (S)	25 60	30 31	(S) —	152 1521 1522
12 554	14 844	45	268	*252	(D)	998	191 696	56 315	7	10	43	1531
(S) 68 845	(S) 377 893	— 23 494	(S) 2 959	— 435	(S) 15 284	(S) 2 926	(S) 618 816	(S) 115 214	(D) 6	(D) 5	— 1	154 1541 1542
												16
36 344	22 512	37 425	4 120	1 892	20 150	917	81 401	41 299	4	3	1	1611
— *3 759 (D)	— *1 519 (D)	— 646 (D)	— (S) 1 321	— 177 142	— 483 2 642	— 50 (D)	— 2 716 (D)	— 1 658 (D)	— 35 (Z)	— 47 (D)	— (Z) (Z)	162 1622 1623 1629
												17
35 174	10 388	54 709	1 874	953	10 926	1 172	94 492	51 141	4	2	3	1711
(D)	(D)	(D)	(D)	(D)	1 556	268	17 454	13 356	(Z)	(D)	(D)	1721
11 615	411	16 158	258	(S)	2 699	1 629	121 580	92 759	10	6	(S)	1731
731 1 718 (D)	*114 571 (D)	3 209 (S) (D)	36 55 —	119 117 —	451 904 (D)	96 696 (D)	5 459 20 855 (D)	3 348 12 305 (D)	37 (Z) (D)	34 (Z) (D)	25 (Z) (Z)	174 1741 1742 1743
(S) 2 729	(S) 999	1 592 3 841	31 33	(S) —	(S) (D)	106 93	4 621 (D)	2 266 2 781	(Z) (Z)	(Z) (Z)	(S) —	175 1751 1752
6 518	(D)	(D)	(D)	(D)	(D)	526	34 671	32 158	(Z)	(D)	(D)	1761
(D)	(D)	1 962	(D)	(D)	(D)	80	*6 827	2 828	(D)	(D)	(D)	1771
—	—	—	—	—	—	(D)	(D)	(D)	—	—	—	1781
— 2 453 (D) (D) (D)	— (D) 1 200 (D) (D) (D)	— (D) 10 017 (D) (D) (D)	— (D) 359 (D) (D) (D)	— (D) 11 (D) (D) —	— (D) 254 (D) (D) (D)	(D) (D) (D) (D) —	(D) (D) (D) (D) 7 966 *14 245	(D) (D) (D) (D) 6 064 *8 669	— (D) 18 (D) (D) (D)	— (D) 12 (D) (D) (D)	— (D) (Z) (D) (D) —	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	333	409	439	531	4	5	7	8
Proprietors and working partners	60	32	38	188	9	28	26	19
All employees**	6 954	11 222	7 461	11 061	3	2	2	4
Construction workers:								
March	5 168	8 705	5 381	8 302	3	1	2	3
May	5 284	9 133	5 975	9 072	3	1	2	4
August	5 366	9 202	5 778	9 352	3	1	2	4
November	5 031	8 224	5 358	9 085	3	1	2	5
Average	5 212	8 816	5 648	8 958	3	1	2	4
Other employees:								
March	1 767	2 713	1 810	2 079	3	16	2	4
May	1 769	2 270	(NA)	(NA)	3	2	(NA)	(NA)
August	1 739	2 341	(NA)	(NA)	2	2	(NA)	(NA)
November	1 694	2 297	(NA)	(NA)	3	2	(NA)	(NA)
Average	1 742	2 405	(NA)	(NA)	3	5	(NA)	(NA)
Payroll, all employees	215 031	285 326	148 695	155 244	2	1	2	2
Payroll, construction workers	141 583	197 960	100 008	117 871	2	1	2	2
Payroll, other employees	73 448	87 365	48 686	37 373	2	1	2	2
First-quarter payroll, all employees	50 281	67 674	36 457	34 971	4	2	2	2
Fringe benefits, all employees	46 121	62 728	27 161	29 823	3	2	2	2
Legally required expenditures	28 571	45 983	19 559	17 158	3	2	2	2
Voluntary expenditures	17 550	16 745	7 602	12 665	2	4	2	1
Dollar value of business done	1 029 736	1 397 896	703 618	676 657	2	2	2	2
Value of construction work	1 018 172	1 351 297	645 082	646 044	2	2	2	2
Value of construction work subcontracted in from others	190 626	187 345	134 766	120 733	3	3	9	(Z)
Other business receipts	11 565	20 471	49 264	30 613	6	7	1	4
Net value of construction†	558 322	734 174	379 381	430 975	2	2	2	2
Value added††	350 594	500 280	277 143	275 478	2	2	2	1
Selected costs	679 142	871 487	417 202	391 980	2	2	2	2
Materials, components, and supplies	207 207	240 590	143 334	167 543	3	2	2	3
Construction work subcontracted out to others	459 850	617 122	265 701	215 069	2	2	2	2
Selected power, fuels, and lubricants	12 085	13 774	8 167	9 369	2	2	2	2
Electricity	2 981	2 924	1 354	1 993	1	3	4	3
Natural gas	809	594	750	781	2	3	4	4
Gasoline and diesel fuel	6 822	9 241	5 362	5 072	4	2	3	2
On highway use	5 327	7 015	(NA)	(NA)	3	3	(NA)	(NA)
Off highway use	1 495	2 225	(NA)	(NA)	12	2	(NA)	(NA)
Other, including lubricating oils and greases	1 473	1 014	700	1 523	1	3	2	4
Rental cost for machinery, equipment, and buildings	13 730	16 325	9 433	9 865	4	4	3	2
For machinery and equipment	8 989	10 581	6 950	8 550	5	7	3	2
For buildings	4 741	5 743	2 483	1 315	3	3	4	3
Selected purchased services	10 404	10 954	6 876	7 921	3	2	3	2
Communication services	3 132	3 814	2 064	1 812	4	3	4	2
Repairs to buildings and other structures	1 694	750	705	619	1	6	3	14
Repairs to machinery and equipment	5 579	6 389	4 106	5 490	4	1	2	1
Ownership of construction projects:								
Value of construction work	1 018 172	1 351 297	645 082	646 044	2	2	2	2
Government owned	474 628	305 887	150 563	294 512	4	2	6	1
Federal	180 801	151 948	(NA)	(NA)	2	2	(NA)	(NA)
State and local	293 827	153 939	(NA)	(NA)	6	2	(NA)	(NA)
Privately owned	543 544	1 045 409	494 518	351 532	3	4	3	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	77 064	58 208	7	3
Capital expenditures, other than land -----	5 461	8 543	3	5
New -----	4 854	7 288	3	5
Used -----	607	1 254	8	10
Retirements and disposition of depreciable assets -----	(S)	2 063	(S)	6
End-of-year gross book value of depreciable assets -----	80 658	64 688	6	3
Depreciation charges during year -----	7 442	7 693	2	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	22 207	14 057	24	6
Capital expenditures, other than land -----	83	723	(Z)	9
New buildings and other structures -----	79	564	(Z)	(Z)
Used buildings and other structures -----	4	*158	(Z)	40
Retirements and disposition of depreciable assets -----	162	98	(Z)	6
End-of-year gross book value of depreciable assets -----	22 128	14 681	24	6
Depreciation charges during year -----	910	1 394	9	6
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	54 857	44 151	1	3
Capital expenditures, other than land -----	5 378	7 820	3	5
New machinery and equipment, including automobiles and trucks -----	4 775	6 723	3	6
New automobiles and trucks, intended primarily for highway use -----	1 826	3 091	6	12
Used machinery and equipment, including automobiles and trucks -----	603	1 096	8	10
Retirements and disposition of depreciable assets -----	(S)	1 964	(S)	6
End-of-year gross book value of depreciable assets -----	58 530	50 007	1	3
Depreciation charges during year -----	6 532	6 299	2	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	333	4
Value of construction work	1 018 172	2
Establishments with inventories:		
Number	94	10
Value of construction work	297 135	2
Inventories ¹ :		
End of 1992, materials and supplies	3 603	6
End of 1991, materials and supplies	3 068	7
Establishments with no inventories:		
Number	91	11
Value of construction work	400 730	2
Establishments not reporting:		
Number	149	10
Value of construction work	320 307	4

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	333	(S)	50	52	50	15	8	6	—	—	
All employees** -----	6 954	(S)	(S)	755	1 414	1 070	1 099	1 960	—	—	
Payroll, all employees -----	215 031	(S)	8 377	19 201	38 362	73 186	(D)	70 625	—	—	
Dollar value business done -----	1 029 736	33 317	36 296	81 412	161 832	178 236	220 408	318 235	—	—	
Value of construction work -----	1 018 172	33 167	35 739	79 669	158 016	177 099	219 295	315 186	—	—	
Net value of construction work† -----	558 322	21 879	(S)	58 790	102 726	<u>203 164</u>	(D)	144 082	—	—	
Value added†† -----	350 594	13 037	(S)	40 217	65 764	<u>128 894</u>	(D)	85 481	—	—	
Cost of materials, components, supplies, and fuels -----	219 292	8 992	11 036	20 317	40 777	<u>76 520</u>	(D)	61 650	—	—	
Cost of construction work subcontracted out to others -----	459 850	*11 289	*8 058	20 879	55 291	<u>193 230</u>	(D)	171 104	—	—	
Rental cost for machinery, equipment, and buildings -----	13 730	*858	286	980	3 042	<u>3 027</u>	2 850	2 686	—	—	
Capital expenditures, other than land -----	5 461	(S)	(S)	351	516	<u>2 487</u>	(D)	1 419	—	—	
End-of-year gross book value of depreciable assets -----	80 658	(S)	7 524	5 479	(S)	<u>30 318</u>	(D)	21 180	—	—	
1987											
All employees** -----	11 222	(S)	448	(S)	1 826	1 316	1 926	<u>4 169</u>	(D)	—	
Value of construction work -----	1 351 297	(S)	(D)	(S)	202 316	111 734	<u>769 088</u>	(D)	(D)	—	
Value added†† -----	500 280	(S)	18 640	(S)	82 890	57 651	<u>78 703</u>	<u>181 750</u>	(D)	—	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	3	(S)	(S)	15	12	(Z)	(Z)	(Z)	—	—	
Net value of construction work† -----	2	19	(S)	11	10	(Z)	(D)	(Z)	—	—	
Capital expenditures, other than land -----	3	(S)	(S)	21	(Z)	(Z)	(D)	(Z)	—	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	333	18	(S)	29	(S)	(S)	42	60	23	18	19
All employees** -----	6 954	*11	(S)	*67	(S)	(S)	361	1 096	731	994	3 204
Payroll, all employees -----	215 031	64	(S)	524	(S)	(S)	7 861	26 264	19 159	28 894	123 093
Dollar value of business done -----	1 029 736	275	(S)	2 371	(S)	(S)	29 056	88 273	81 386	122 609	679 438
Value of construction work -----	1 018 172	275	(S)	2 369	(S)	(S)	28 594	84 111	80 503	121 189	674 925
Net value of construction work† -----	558 322	187	(S)	2 113	(S)	(S)	18 762	67 366	54 652	90 500	301 437
Value added†† -----	350 594	(S)	(S)	1 340	(S)	(S)	13 422	43 060	33 951	59 994	183 839
Cost of materials, components, supplies, and fuels -----	219 292	*103	(S)	775	(S)	(S)	5 802	28 467	21 584	31 926	122 111
Cost of construction work subcontracted out to others -----	459 850	*88	(S)	*256	(S)	(S)	*9 832	16 745	25 851	30 689	373 488
Rental cost for machinery, equipment, and buildings -----	13 730	(D)	(S)	(S)	(S)	(S)	511	1 466	1 038	<u>10 391</u>	(D)
Capital expenditures, other than land -----	5 461	—	(S)	(D)	(S)	(S)	195	276	489	<u>3 873</u>	(D)
End-of-year gross book value of depreciable assets -----	80 658	20	(S)	341	(S)	(S)	2 540	6 504	(S)	11 268	46 856
1987											
All employees** -----	11 222	(S)	*11	(S)	(S)	(S)	580	(S)	827	1 735	5 737
Value of construction work -----	1 351 297	(S)	*332	(S)	(S)	(S)	(D)	(S)	98 774	148 646	906 491
Value added†† -----	500 280	(S)	(D)	(S)	(S)	(S)	20 101	(S)	40 872	72 847	279 183
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	3	43	(S)	46	(S)	(S)	19	13	19	(Z)	(Z)
Net value of construction work† -----	2	24	(S)	34	(S)	(S)	23	15	18	(Z)	(Z)
Capital expenditures, other than land -----	3	—	(S)	(D)	(S)	(S)	30	19	(Z)	(Z)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

DC-10 DISTRICT OF COLUMBIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work ¹				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 018 172	498 469	347 349	146 318	2	3	4	2
Building construction	836 094	473 825	273 271	88 997	2	2	5	2
Single-family houses	104 221	65 757	23 619	14 845	10	13	21	7
Single-family houses, detached	79 349	57 540	14 853	6 956	11	15	6	13
Single-family houses, attached, including townhouses and townhouse-type condominiums	24 872	8 217	* 8 766	7 889	21	12	59	2
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	42 223	12 699	16 895	12 629	4	2	9	2
Other residential buildings, including hotels, motels, and tourist cabins	14 105	(D)	(D)	(D)	1	(D)	(D)	(D)
Office buildings	302 011	153 435	122 139	26 438	3	(Z)	8	(Z)
Other commercial buildings such as stores, restaurants, and automobile service stations	46 495	14 832	23 960	7 703	6	12	7	2
Industrial buildings and warehouses	69 067	31 670	(S)	18 180	12	7	(S)	2
Industrial buildings	58 807	23 573	(S)	17 750	14	10	(S)	2
Warehouses	10 260	8 097	(S)	430	1	(Z)	(S)	16
Religious buildings	9 757	7 648	1 350	759	24	31	5	8
Educational buildings	141 550	110 504	26 432	4 614	4	4	7	1
Hospitals and institutional buildings	72 060	(D)	(D)	1 445	1	(D)	(D)	19
Amusement, social, and recreational buildings, indoors	17 537	(D)	(D)	1 368	26	(D)	(D)	2
Other nonresidential buildings	17 067	(D)	(D)	(D)	3	(D)	(D)	(D)
Nonbuilding construction	156 041	24 643	74 078	57 320	3	11	2	6
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	96 384	11 561	40 033	44 790	4	23	5	3
Power and communication transmission lines, towers, and related facilities	* 6 224	(D)	(D)	(D)	50	(D)	(D)	(D)
Other nonbuilding construction	53 434	(D)	(D)	(D)	(Z)	(D)	(D)	(D)
Construction work, n.s.k.	26 036	(NA)	(NA)	(NA)	26	(NA)	(NA)	(NA)
1987								
Value of construction work	1 351 297	923 192	293 271	92 055	2	2	4	6
Building construction	1 082 825	795 843	211 817	75 164	2	2	5	4
Single-family houses	195 271	153 039	14 137	28 094	8	10	7	6
Single-family houses, detached	130 272	94 438	12 771	23 062	6	8	6	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	64 998	58 600	1 366	5 031	19	21	18	17
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	83 038	58 991	8 219	15 827	3	1	5	12
Other residential buildings, including hotels, motels, and tourist cabins	7 733	3 886	3 140	706	4	3	4	23
Office buildings	483 661	352 393	119 430	11 838	1	1	4	5
Other commercial buildings such as stores, restaurants, and automobile service stations	136 540	87 669	38 169	10 700	6	8	2	16
Industrial buildings and warehouses	20 106	14 028	4 785	1 291	7	9	9	4
Industrial buildings	9 037	5 556	2 760	720	2	2	1	6
Warehouses	11 068	8 472	2 025	570	13	14	21	(Z)
Religious buildings	9 118	(D)	(D)	1 842	7	(D)	(D)	24
Educational buildings	68 072	53 026	13 334	1 711	7	(Z)	37	30
Hospitals and institutional buildings	48 810	(D)	(D)	2 924	(Z)	(D)	(D)	1
Other nonresidential buildings	30 476	28 463	1 791	231	(Z)	(Z)	(Z)	(Z)
Nonbuilding construction	225 695	127 349	81 454	16 891	3	5	1	5
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	83 900	35 906	35 178	12 816	5	8	1	6
Other nonbuilding construction	141 795	91 443	46 276	4 075	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	42 776	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	333	5 212	5 168	5 284	5 366	5 031	4	3	3	3	3	3
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	62	307	262	298	401	267	18	26	24	25	30	24
1522	Other residential buildings -----	*13	*39	*72	*32	*40	*12	58	58	73	47	56	63
1531	Operative builders -----	12	111	121	119	98	108	23	5	4	4	5	4
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	*4	(S)	(S)	(S)	(S)	(S)	62	(S)	(S)	(S)	(S)	(S)
1542	Nonresidential buildings, n.e.c. ---	61	1 615	1 692	1 624	1 601	1 541	15	7	9	10	9	10
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	10	590	578	602	554	624	22	3	3	3	4	4
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	—	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines -----	*6	143	109	119	*184	*159	41	35	22	26	42	42
1629	Heavy construction, n.e.c. -----	6	103	(D)	(D)	(D)	(D)	(Z)	(Z)	(D)	(D)	(D)	(D)
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	39	957	938	967	1 013	910	10	4	4	5	3	2
1721	Painting and paper hanging -----	16	208	156	257	238	181	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1731	Electrical work -----	30	256	270	248	252	254	14	9	11	9	11	9
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	8	46	45	49	50	*41	32	35	36	33	27	40
1742	Plastering, drywall, and insulation work -----	4	81	61	114	101	48	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1743	Terrazzo, tile, marble, and mosaic work -----	2	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:												
1751	Carpentry -----	15	56	51	54	55	(S)	(Z)	(Z)	(Z)	(Z)	(Z)	(S)
1752	Floor laying and other floor work --	7	47	45	45	48	48	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1761	Roofing, siding, and sheet metal work -----	8	290	(D)	294	(D)	278	(Z)	(Z)	(D)	(Z)	(D)	(Z)
1771	Concrete work -----	*12	166	(D)	157	174	(D)	45	6	(D)	7	6	(D)
1781	Water well drilling -----	—	—	—	—	—	—	—	—	—	—	—	—
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	—	—	—	—	—	—	—	—	—	—	—	—
1793	Glass and glazing work -----	2	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work -----	*10	49	91	37	32	35	54	22	12	29	34	31
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	3	64	(D)	71	(D)	(D)	(Z)	(Z)	(D)	(Z)	(D)	(D)
1799	Special trade contractors, n.e.c. ---	3	(D)	10	(D)	(D)	(D)	(Z)	(Z)	(D)	(D)	(D)	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in the District: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	20.9	30.9	195.4	.211	.215	.452	.187	.013
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	6.7	19.8	118.5	.226	.279	.269	*.048	.006
1522	Other residential buildings -----	3.8	10.1	57.2	.227	.155	.106	.011	.001
1531	Operative builders -----	20.3	33.8	357.4	.200	.316	.374	.001	.007
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c. -----	37.5	32.0	340.0	.132	.125	.688	.043	.005
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	71.3	36.5	166.6	.268	.370	.229	.381	.042
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines -----	28.0	20.6	68.3	.346	.385	.156	*.066	(S)
1629	Heavy construction, n.e.c. -----	25.0	40.5	(D)	(D)	(D)	(D)	(D)	(D)
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	32.2	32.7	111.2	.384	.331	.098	.514	.018
1721	Painting and paper hanging -----	15.2	(D)	74.3	(D)	(D)	(D)	(D)	(D)
1731	Electrical work -----	11.7	30.8	126.0	.339	.360	.013	.501	.008
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	7.0	27.7	72.0	.485	.221	.035	.969	.011
1742	Plastering, drywall, and insulation work -----	23.5	31.2	67.5	.537	.314	.105	(S)	.010
1743	Terrazzo, tile, marble, and mosaic work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:								
1751	Carpentry -----	4.7	20.4	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floor work -----	9.4	22.1	104.8	.297	.554	.203	.780	.007
1761	Roofing, siding, and sheet metal work -----	39.9	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1771	Concrete work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1781	Water well drilling -----	—	—	—	—	—	—	—	—
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	—	—	—	—	—	—	—	—
1793	Glass and glazing work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work -----	6.0	34.5	206.0	.205	.243	.119	.992	.036
1795	Wrecking and demolition work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c. -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	WASHINGTON-BALTIMORE, DC-MD-VA-WV CMSA											
15,16, 17	Construction industries	17 387	176 268	4 603 770	20 018 974	14 144 696	8 669 507	6 022 675	5 874 278	192 779	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	3 588	15 929	309 642	1 698 388	1 241 643	695 235	566 367	456 745	20 692	4	4
1522	Other residential buildings	226	1 477	36 166	276 579	138 249	97 076	45 215	138 329	847	9	27
1531	Operative builders	678	7 392	236 515	2 926 613	1 717 507	1 050 013	922 273	1 209 106	11 497	3	3
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	80	1 195	31 408	165 692	90 417	48 216	43 526	75 275	1 460	11	11
1542	Nonresidential buildings, n.e.c.	1 059	18 505	585 079	4 356 708	1 674 712	1 048 575	758 462	2 681 996	14 054	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	245	8 767	251 414	1 021 315	792 948	491 292	332 230	228 367	25 055	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	28	1 230	30 403	128 658	93 101	59 929	33 593	35 557	1 847	3	3
1623	Water, sewer, and utility lines	232	7 525	195 589	624 327	542 529	356 139	190 347	81 798	17 495	2	2
1629	Heavy construction, n.e.c.	252	7 451	302 916	914 799	681 091	437 734	252 784	233 708	9 634	2	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	2 187	24 142	675 399	2 221 471	1 903 537	1 111 170	813 141	317 934	24 730	1	1
1721	Painting and paper hanging	1 034	6 502	127 442	311 669	286 571	209 593	78 866	25 098	3 125	5	4
1731	Electrical work	1 621	18 541	512 527	1 475 819	1 429 858	841 135	606 962	45 961	17 122	2	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	794	7 256	137 152	351 135	334 418	206 847	129 792	16 717	5 647	3	3
1742	Plastering, drywall, and insulation work	547	8 514	218 153	556 510	496 262	322 717	175 708	60 248	6 108	3	2
1743	Terrazzo, tile, marble, and mosaic work	193	1 107	27 990	77 320	75 029	42 743	32 750	2 291	*623	8	7
175	Carpentry and floor work:											
1751	Carpentry	1 287	7 068	137 931	418 740	356 845	223 581	136 642	61 895	4 777	5	5
1752	Floor laying and other floor work	342	1 951	46 253	196 556	178 225	82 497	99 330	18 331	1 344	6	6
1761	Roofing, siding, and sheet metal work	790	7 361	172 130	484 263	455 997	272 976	186 542	28 266	4 393	3	3
1771	Concrete work	771	8 849	182 629	650 557	590 618	337 123	256 713	59 939	10 278	3	2
1781	Water well drilling	45	420	11 647	35 350	35 127	23 589	11 566	(S)	1 160	4	6
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	77	1 420	43 891	120 697	112 610	72 141	41 465	8 087	2 505	7	6
1793	Glass and glazing work	121	1 090	28 351	86 542	83 848	44 209	41 570	2 693	311	6	5
1794	Excavation work	417	2 874	71 092	244 695	211 045	162 126	62 327	33 649	3 288	7	6
1795	Wrecking and demolition work	33	631	13 288	44 454	40 376	32 910	9 327	4 078	842	4	3
1796	Installing building equipment, n.e.c.	105	3 067	89 574	272 269	262 072	187 194	78 227	10 198	1 040	2	3
1799	Special trade contractors, n.e.c.	635	6 003	129 189	357 849	320 061	212 747	116 949	37 788	2 904	5	4
	Baltimore, MD PMSA											
15,16, 17	Construction industries	6 647	59 167	1 447 718	6 196 218	4 592 118	2 854 549	1 975 464	1 604 100	74 913	1	1
	(See appropriate State for SIC detail.)											
	Hagerstown, MD PMSA											
15,16, 17	Construction industries	347	3 026	65 872	283 106	206 110	114 847	98 262	76 996	3 806	5	5
	(See appropriate State for SIC detail.)											

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	WASHINGTON-BALTIMORE, DC-MD-VA-WV CMSA—Con.											
	Washington, DC-MD-VA-WV PMSA											
15,16,17	Construction industries	10 393	114 075	3 090 179	13 539 649	9 346 467	5 700 111	3 948 948	4 193 182	114 060	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	2 093	9 503	192 733	965 039	696 093	374 061	334 635	268 947	10 749	5	6
1522	Other residential buildings	142	1 016	25 381	209 532	99 368	67 967	34 552	110 164	523	9	37
1531	Operative builders	452	5 377	173 629	2 104 677	1 228 742	702 215	693 870	875 935	8 651	3	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	45	471	15 366	96 313	47 475	32 419	(D)	48 838	884	24	19
1542	Nonresidential buildings, n.e.c.	667	13 705	445 460	3 244 455	1 261 505	805 537	495 454	1 982 950	10 441	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	145	4 973	144 149	583 830	457 271	283 120	188 816	126 559	10 146	3	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	*10	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	162	5 245	129 511	424 257	369 281	249 331	122 119	54 976	12 942	3	2
1629	Heavy construction, n.e.c.	(S)	5 450	243 005	656 246	(D)	312 991	157 161	(D)	(D)	2	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 350	15 257	438 623	1 422 452	1 204 782	703 226	516 565	217 671	15 393	2	1
1721	Painting and paper hanging	637	4 279	81 944	198 314	179 801	134 149	46 864	18 513	1 493	6	4
1731	Electrical work	975	11 920	339 994	1 000 035	965 642	564 687	414 826	34 393	10 450	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	471	4 693	88 901	226 767	217 210	131 892	86 872	9 557	4 500	4	4
1742	Plastering, drywall, and insulation work	338	5 597	147 063	373 788	332 416	215 892	118 267	41 372	4 752	4	2
1743	Terrazzo, tile, marble, and mosaic work	131	846	21 602	62 044	59 951	33 638	26 768	2 093	(D)	9	7
175	Carpentry and floor work:											
1751	Carpentry	731	4 103	86 552	264 674	223 856	134 998	89 399	40 817	2 756	5	6
1752	Floor laying and other floor work	201	1 334	(D)	145 145	130 936	61 117	73 373	14 210	860	6	7
1761	Roofing, siding, and sheet metal work	409	4 396	109 476	300 776	283 762	170 788	114 107	17 014	2 404	3	3
1771	Concrete work	473	5 648	110 931	421 305	376 635	212 667	166 998	44 670	5 838	3	3
1781	Water well drilling	21	(D)	(D)	(D)	(D)	(D)	5 588	(D)	526	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	43	786	22 353	60 827	55 808	37 994	(D)	5 019	(S)	10	10
1793	Glass and glazing work	82	750	21 023	63 211	61 434	33 976	29 388	1 777	(D)	8	7
1794	Excavation work	250	1 877	44 243	166 462	140 273	105 750	44 452	26 190	1 910	9	8
1795	Wrecking and demolition work	10	167	3 707	(D)	(D)	12 724	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c.	52	2 399	68 420	210 083	204 030	143 129	60 901	6 053	870	3	4
1799	Special trade contractors, n.e.c.	369	3 659	85 383	239 475	211 441	138 336	78 984	28 035	(D)	6	5

CONSTRUCTION—GEOGRAPHIC AREA SERIES

DISTRICT OF COLUMBIA DC-15

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Statistics for Establishments With Payroll

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Florida. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 110,393 establishments in this State operating in the construction industries. These establishments accounted for \$33.2 billion in total dollar value of business done.

Most of the 110,393 construction establishments were small. Of the total, 76,102 were nonemployers, and over half of the employer establishments had less than 5 employees. The 13,194 construction establishments with 5 employees or more, while representing only 12 percent of all establishments, accounted for more than 78 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$30.5 billion in total dollar value of business done. Of this amount, \$30.0 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$8.4 billion, leaving net value of construction work of \$21.6 billion. In addition, these establishments paid out \$11.1 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$12.0 billion. (See Introduction and appendixes for explanation of terms.)

There were 34,291 establishments with total employment averaging 274,503 during the year. Total payroll for 1992 was \$5.7 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 76,102 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$2.6 billion. Most of these establishments, about 85 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

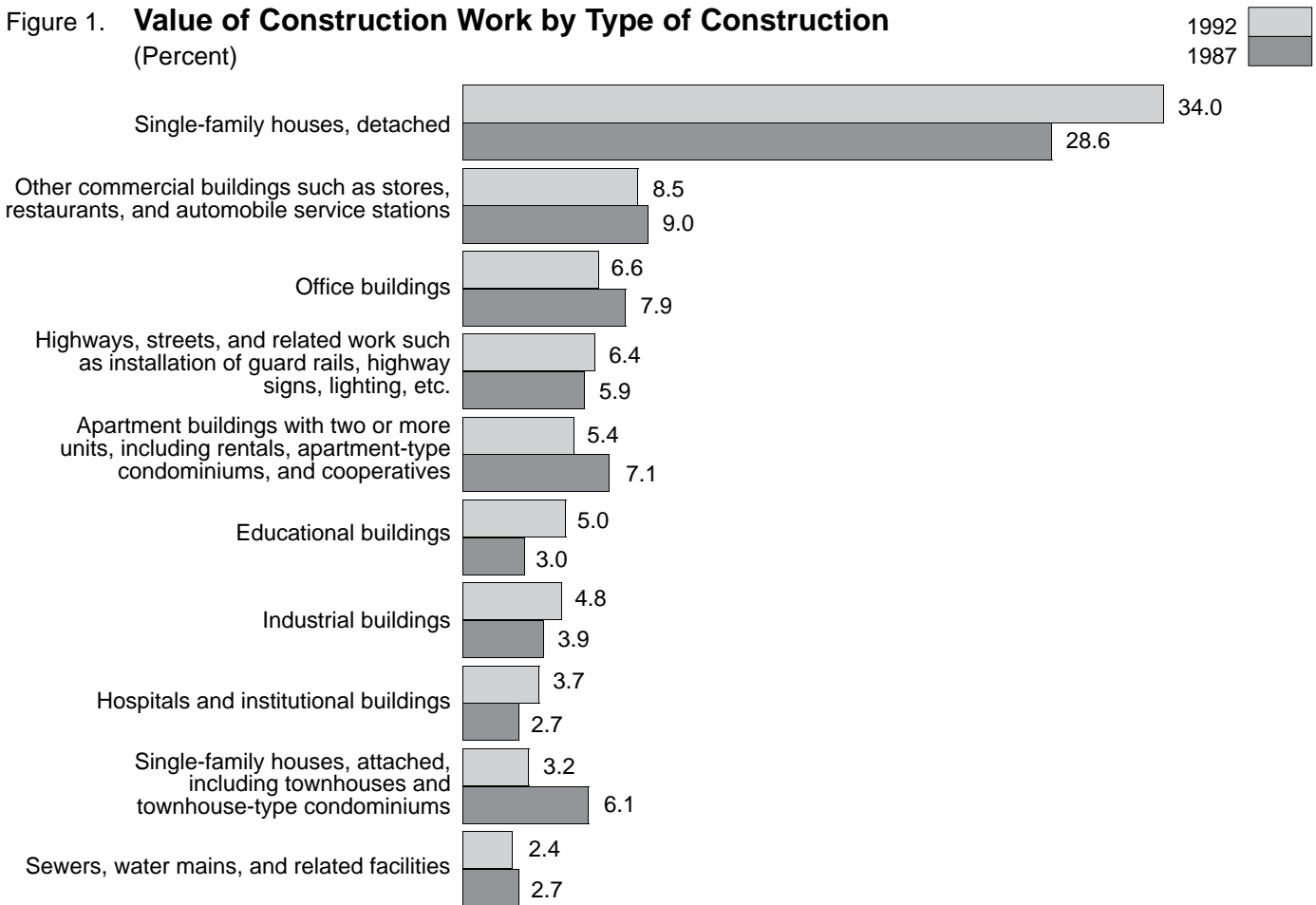


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

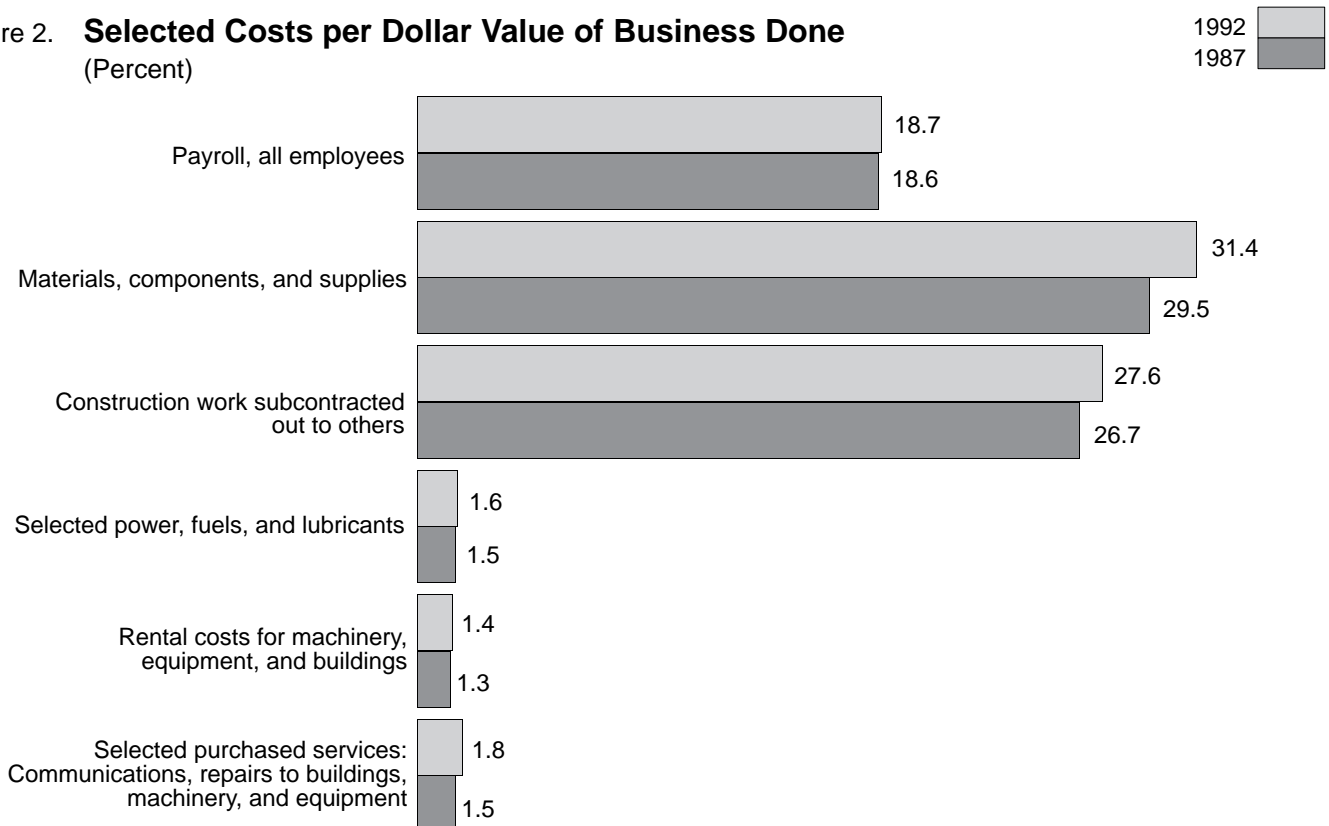


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	110 393	76 484	274 503	33 154 466	76 102	69 406	2 609 067	34 291	7 078	274 503	30 545 399	(Z)	1
15	Building construction—General contractors and operative builders ----	19 883	8 969	67 890	15 272 722	10 679	7 598	950 920	9 204	(S)	67 890	14 321 802	1	1
16	Heavy construction other than building construction—contractors -----	2 952	1 094	37 929	4 438 101	1 013	842	47 974	1 939	(S)	37 929	4 390 127	1	1
17	Special trade contractors -----	87 559	66 422	168 683	13 443 644	64 410	60 966	1 610 173	23 149	5 456	168 683	11 833 471	1	1
1711	Plumbing, heating, and air-conditioning --	8 831	4 582	36 926	3 099 635	4 247	3 795	148 248	4 584	787	36 926	2 951 387	1	1
1731	Electrical work -----	7 551	4 024	31 983	2 314 041	3 908	3 545	88 065	3 643	(S)	31 983	2 225 976	1	2
	1987													
15, 16, 17	Construction industries² -----	112 111	79 346	329 877	37 542 961	78 173	73 727	5 322 365	33 938	5 619	329 877	32 220 596	(Z)	1
15	Building construction—General contractors and operative builders ----	23 071	12 237	85 116	17 479 675	13 668	11 139	1 776 341	9 403	1 098	85 116	15 703 334	1	1
16	Heavy construction other than building construction—contractors -----	2 937	1 114	44 265	4 305 433	910	820	80 375	2 027	294	44 265	4 225 058	1	1
17	Special trade contractors -----	82 182	63 063	195 192	13 313 138	60 535	58 932	1 900 573	21 647	4 131	195 192	11 412 565	1	1
1711	Plumbing, heating, and air-conditioning --	8 214	4 366	42 344	2 999 684	3 877	3 660	169 944	4 337	706	42 344	2 829 740	1	1
1731	Electrical work -----	6 615	3 785	36 281	2 125 766	3 542	3 366	105 513	3 073	419	36 281	2 020 253	1	1

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	34 291	274 503	203 988	5 709 605	3 744 663	30 032 845	21 604 733	12 025 405
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	5 435	26 220	17 623	454 401	266 775	4 071 208	2 593 783	1 200 017
1522	Other residential buildings -----	325	4 079	2 654	86 423	44 251	685 919	317 175	189 985
1531	Operative builders -----	1 263	11 974	4 600	301 024	75 323	4 109 533	2 514 360	1 414 786
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	310	5 102	3 512	140 274	87 477	980 950	594 520	263 371
1542	Nonresidential buildings, n.e.c. -----	1 872	20 515	13 885	504 459	278 800	4 215 323	1 740 617	900 386
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction -----	480	14 687	12 010	337 493	243 439	1 873 875	1 357 683	792 949
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	32	1 781	1 476	45 063	32 005	312 602	205 848	79 328
1623	Water, sewer, and utility lines -----	561	11 394	9 400	240 748	178 599	945 905	785 993	485 955
1629	Heavy construction, n.e.c. -----	865	10 067	7 903	247 232	173 349	1 163 267	945 080	597 978
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	4 584	36 926	26 905	795 789	535 653	2 910 802	2 649 193	1 432 364
1721	Painting and paper hanging -----	1 977	9 487	7 612	156 223	118 632	465 632	429 659	294 264
1731	Electrical work -----	3 643	31 983	25 019	696 199	494 589	2 202 452	2 119 300	1 201 376
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	1 047	7 217	6 457	117 911	96 904	347 108	(D)	214 528
1742	Plastering, drywall, and insulation work -----	1 405	13 995	11 328	273 741	200 317	944 259	801 458	465 298
1743	Terrazzo, tile, marble, and mosaic work -----	793	3 162	2 537	51 810	39 929	176 205	165 524	89 645
175	Carpentry and floor work:								
1751	Carpentry -----	2 050	9 780	7 919	174 786	125 783	631 024	545 869	333 492
1752	Floor laying and other floor work -----	448	2 000	1 418	37 649	24 965	184 464	163 264	77 002
1761	Roofing, siding, and sheet metal work -----	2 024	15 802	11 984	286 413	190 011	1 141 258	1 030 533	540 469
1771	Concrete work -----	1 470	10 159	8 324	185 129	137 540	624 162	570 944	357 150
1781	Water well drilling -----	224	1 035	788	21 571	15 551	86 306	83 666	45 558
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	225	2 729	2 209	57 955	41 592	192 766	168 939	93 483
1793	Glass and glazing work -----	303	1 942	1 285	38 192	23 128	138 718	134 495	69 276
1794	Excavation work -----	617	3 813	3 090	79 892	58 441	306 274	269 123	177 876
1795	Wrecking and demolition work -----	45	472	341	8 473	6 282	34 995	30 362	25 048
1796	Installing building equipment, n.e.c. -----	169	4 603	3 609	116 464	88 234	351 920	(D)	196 967
1799	Special trade contractors, n.e.c. -----	2 124	13 579	10 100	254 294	167 093	935 920	801 969	486 853

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
10 091 882	8 428 112	7 818 648	440 839	394 569	3 684 470	329 877	30 391 051	12 538 541	(Z)	1	2	15, 16, 17
												15
1 451 004 159 677	1 477 425 368 744	125 692 28 190	22 748 4 809	27 968 3 065	227 639 18 730	25 482 6 936	3 174 347 1 042 664	1 006 086 248 104	3 8	3 6	10 31	152 1521 1522
1 221 719	1 595 173	42 537	12 194	20 972	272 035	18 875	5 120 878	1 363 618	2	4	23	1531
342 894 875 485	386 430 2 474 706	38 717 119 888	13 550 38 674	4 582 17 287	42 865 175 629	4 548 29 275	595 060 4 661 665	170 901 1 218 976	4 3	4 3	20 12	154 1541 1542
												16
626 210	516 192	413 282	62 257	71 220	719 990	17 238	1 881 250	923 701	2	1	4	1611
128 381 307 313 370 967	106 754 159 912 218 187	38 463 232 297 201 404	12 326 25 367 51 775	9 338 31 440 32 724	38 896 310 156 329 001	853 13 953 12 221	107 728 1 031 670 1 045 318	33 219 579 351 537 580	4 2 3	2 2 2	3 7 7	162 1622 1623 1629
												17
1 257 414	261 609	1 557 301	43 274	39 114	348 139	42 344	2 793 088	1 412 969	1	1	8	1711
137 004	35 973	248 541	10 538	6 826	52 642	10 776	400 418	271 441	4	4	15	1721
941 447	83 152	1 376 598	33 443	25 826	232 167	36 281	1 998 988	1 130 468	1	1	7	1731
(D) 352 294 79 362	(D) 142 800 10 681	257 635 716 584 114 178	5 195 10 471 1 715	5 160 10 378 2 117	39 028 71 758 20 908	9 332 19 940 3 280	374 331 1 194 405 200 112	226 009 609 418 99 886	4 4 6	(D) 3 5	14 12 23	174 1741 1742 1743
219 075 87 719	85 155 21 200	472 310 99 453	13 530 2 219	7 254 1 459	59 767 20 012	10 700 1 336	531 014 109 423	287 369 54 113	4 6	4 8	21 33	175 1751 1752
494 700	110 725	449 111	16 307	16 742	130 810	17 824	1 008 422	527 615	3	3	13	1761
221 282	53 218	427 944	13 837	13 853	132 667	15 711	784 294	455 722	4	4	15	1771
38 726	2 640	17 610	893	1 337	24 642	1 229	88 155	53 803	8	7	18	1781
78 029 72 669 100 471 (D) 79 577 332 803	23 828 4 223 37 150 4 633 (D) 133 951	145 732 93 399 181 899 5 745 75 896 338 240	5 107 3 346 12 484 1 622 3 733 19 425	2 690 1 022 16 468 630 2 642 22 455	37 539 13 877 186 540 14 022 29 094 135 917	3 272 2 755 5 316 297 2 510 12 289	168 615 187 051 390 622 17 859 210 392 775 563	113 792 99 824 260 320 15 226 136 709 426 271	9 6 6 7 2 4	6 6 6 11 (D) 3	32 24 17 7 5 14	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	34 291	33 938	27 444	21 904	(Z)	1	1	2
Proprietors and working partners	7 078	5 619	6 508	9 687	2	3	3	3
All employees**	274 503	329 877	261 121	196 561	(Z)	(Z)	1	2
Construction workers:								
March	195 863	243 838	207 164	145 250	1	1	1	1
May	204 382	252 002	207 987	152 280	1	1	1	1
August	210 059	262 086	209 163	159 733	1	1	1	1
November	205 648	254 505	198 985	162 092	1	1	1	1
Average	203 988	253 108	208 330	154 964	1	1	1	1
Other employees:								
March	70 878	75 859	52 061	39 064	1	1	1	6
May	69 635	75 881	(NA)	(NA)	1	1	(NA)	(NA)
August	70 159	77 844	(NA)	(NA)	1	1	(NA)	(NA)
November	71 387	77 532	(NA)	(NA)	1	1	(NA)	(NA)
Average	70 515	76 779	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	5 709 605	5 990 377	3 885 088	2 031 791	(Z)	(Z)	(Z)	1
Payroll, construction workers	3 744 663	4 069 807	2 846 658	1 481 678	(Z)	(Z)	(Z)	1
Payroll, other employees	1 964 942	1 920 569	1 038 429	550 114	1	1	1	1
First-quarter payroll, all employees	1 309 509	1 358 833	945 171	448 498	1	1	(Z)	1
Fringe benefits, all employees	1 220 091	1 079 029	685 492	344 917	1	1	1	1
Legally required expenditures	926 157	823 412	512 420	241 116	1	1	1	1
Voluntary expenditures	293 934	255 617	173 071	103 801	1	1	1	1
Dollar value of business done	30 545 399	32 220 596	18 352 800	9 345 221	1	1	(Z)	1
Value of construction work	30 032 845	30 391 051	17 475 921	8 752 932	1	1	(Z)	1
Value of construction work subcontracted in from others	7 818 648	7 688 009	4 244 576	2 186 993	2	2	2	(Z)
Other business receipts	512 554	721 305	464 623	592 289	3	2	1	2
Net value of construction†	21 604 733	21 782 192	12 807 981	6 346 092	1	1	(Z)	1
Value added††	12 025 405	12 538 541	7 665 269	3 578 112	1	1	(Z)	1
Selected costs	18 519 994	18 573 820	10 275 275	5 447 987	1	1	1	1
Materials, components, and supplies	9 590 086	9 495 295	5 262 317	2 876 191	1	1	1	1
Construction work subcontracted out to others	8 428 112	8 608 858	4 667 940	2 406 840	1	1	1	1
Selected power, fuels, and lubricants	501 796	469 666	345 018	164 955	1	1	1	2
Electricity	84 972	76 004	54 164	30 116	2	1	1	7
Natural gas	24 927	12 264	7 370	4 763	2	2	1	4
Gasoline and diesel fuel	364 414	347 255	259 682	111 233	1	1	1	1
On highway use	275 774	262 352	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	88 640	84 902	(NA)	(NA)	2	1	(NA)	(NA)
Other, including lubricating oils and greases	27 483	34 142	23 801	18 844	2	2	3	2
Rental cost for machinery, equipment, and buildings	440 839	434 823	230 193	114 330	2	1	1	1
For machinery and equipment	287 773	296 085	173 582	91 746	2	2	1	1
For buildings	153 067	138 737	56 611	22 583	2	2	1	2
Selected purchased services	538 350	478 898	304 767	184 515	2	1	1	1
Communication services	193 779	140 203	82 441	54 751	3	1	1	2
Repairs to buildings and other structures	31 675	31 334	20 949	10 929	4	2	2	8
Repairs to machinery and equipment	312 897	307 360	201 377	118 836	2	1	1	1
Ownership of construction projects:								
Value of construction work	30 032 845	30 391 051	17 475 921	8 752 932	1	1	(Z)	1
Government owned	6 740 179	4 906 165	2 693 248	1 512 790	2	1	2	1
Federal	1 443 643	1 171 260	(NA)	(NA)	3	3	(NA)	(NA)
State and local	5 296 536	3 734 904	(NA)	(NA)	2	2	(NA)	(NA)
Privately owned	23 292 666	25 484 885	14 782 673	7 240 142	1	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	3 522 863	3 160 879	1	1
Capital expenditures, other than land -----	394 569	541 657	2	2
New -----	314 123	446 383	3	2
Used -----	80 446	95 274	5	3
Retirements and disposition of depreciable assets -----	232 963	213 928	4	4
End-of-year gross book value of depreciable assets -----	3 684 470	3 488 607	1	1
Depreciation charges during year -----	396 704	440 214	2	1
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	656 517	760 502	3	3
Capital expenditures, other than land -----	35 535	118 716	9	7
New buildings and other structures -----	26 593	100 821	10	8
Used buildings and other structures -----	8 942	17 894	19	8
Retirements and disposition of depreciable assets -----	32 376	61 253	5	12
End-of-year gross book value of depreciable assets -----	659 676	817 964	3	2
Depreciation charges during year -----	50 287	75 635	6	3
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	2 866 347	2 400 377	1	1
Capital expenditures, other than land -----	359 034	422 941	3	2
New machinery and equipment, including automobiles and trucks -----	287 530	345 561	3	2
New automobiles and trucks, intended primarily for highway use -----	107 303	148 641	4	2
Used machinery and equipment, including automobiles and trucks -----	71 504	77 380	5	4
Retirements and disposition of depreciable assets -----	200 587	152 674	4	3
End-of-year gross book value of depreciable assets -----	3 024 794	2 670 643	1	1
Depreciation charges during year -----	346 417	364 578	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	34 291	(Z)
Value of construction work	30 032 845	1
Establishments with inventories:		
Number	10 275	1
Value of construction work	10 836 255	1
Inventories ¹ :		
End of 1992, materials and supplies	495 906	4
End of 1991, materials and supplies	473 102	5
Establishments with no inventories:		
Number	10 843	1
Value of construction work	11 285 775	1
Establishments not reporting:		
Number	13 174	1
Value of construction work	7 910 815	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Establishments with an average of—									
	Total	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	34 291	(S)	6 520	3 873	2 110	466	177	36	9	3
All employees** -----	274 503	39 579	42 208	51 199	62 195	31 665	25 376	12 161	5 934	4 185
Payroll, all employees -----	5 709 605	617 766	773 563	1 044 913	1 401 308	755 361	612 271	303 664	110 709	90 050
Dollar value of business done -----	30 545 399	4 665 617	4 040 704	4 997 530	7 199 388	3 750 078	3 218 309	1 575 976	592 649	505 147
Value of construction work -----	30 032 845	4 594 882	4 004 207	4 915 725	7 071 018	3 697 672	3 147 747	1 548 324	565 575	487 695
Net value of construction work† -----	21 604 733	3 347 422	3 045 242	3 740 394	4 934 732	2 601 340	2 094 056	1 073 382	<u>768 164</u>	(D)
Value added†† -----	12 025 405	1 785 925	1 675 585	2 092 644	2 859 402	1 423 934	1 235 091	619 377	165 589	167 859
Cost of materials, components, supplies, and fuels -----	10 091 882	1 632 233	1 406 154	1 729 555	2 203 700	1 229 813	929 527	481 657	<u>479 242</u>	(D)
Cost of construction work subcontracted out to others -----	8 428 112	1 247 460	958 965	1 175 331	2 136 286	1 096 332	1 053 691	474 942	<u>285 106</u>	(D)
Rental cost for machinery, equipment, and buildings -----	440 839	51 200	51 309	70 061	106 766	56 088	58 463	29 490	<u>17 462</u>	(D)
Capital expenditures, other than land -----	394 569	55 672	45 380	68 956	76 171	50 980	47 882	38 996	<u>10 532</u>	(D)
End-of-year gross book value of depreciable assets -----	3 684 470	442 803	470 828	538 747	775 681	457 420	592 468	296 838	<u>109 685</u>	(D)
1987										
All employees** -----	329 877	37 373	49 160	59 843	75 844	48 147	36 863	14 914	7 731	—
Value of construction work -----	30 391 051	4 151 903	3 825 351	4 835 627	6 786 225	4 598 130	3 907 047	1 571 049	715 717	—
Value added†† -----	12 538 541	1 471 173	1 653 801	2 094 199	2 917 397	1 862 656	1 569 733	622 919	346 661	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	(Z)	2	3	2	2	2	(Z)	(Z)	(Z)	(Z)
Net value of construction work† -----	1	3	3	2	1	1	(Z)	(Z)	(Z)	(D)
Capital expenditures, other than land -----	2	11	9	8	4	1	(Z)	(Z)	(Z)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics		Establishments with dollar value of business done—									
		Total	Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	$10,000,000 or more
1992											
Number of establishments -----	34 291	(S)	(S)	(S)	8 850	5 801	4 285	3 362	1 243	601	410
All employees** -----	274 503	(S)	(S)	(S)	27 942	32 158	37 148	51 974	35 273	26 554	50 542
Payroll, all employees -----	5 709 605	(S)	(S)	(S)	389 607	531 837	708 889	1 112 392	815 154	700 225	1 320 595
Dollar value of business done -----	30 545 399	(S)	(S)	(S)	1 456 641	2 052 708	3 002 596	5 096 942	4 264 238	4 162 408	10 047 021
Value of construction work -----	30 032 845	(S)	(S)	(S)	1 440 109	2 027 903	2 959 024	5 002 395	4 203 845	4 101 418	9 838 716
Net value of construction work† -----	21 604 733	(S)	(S)	(S)	1 285 457	1 747 804	2 423 540	4 004 759	3 124 788	2 785 720	5 808 927
Value added†† -----	12 025 405	(S)	(S)	(S)	762 779	998 226	1 379 233	2 229 254	1 699 089	1 541 125	3 160 176
Cost of materials, components, supplies, and fuels -----	10 091 882	(S)	(S)	(S)	539 209	774 383	1 087 879	1 870 054	1 486 093	1 305 586	2 857 057
Cost of construction work subcontracted out to others -----	8 428 112	(S)	(S)	(S)	(S)	280 100	535 484	997 635	1 079 056	1 315 697	4 029 789
Rental cost for machinery, equipment, and buildings -----	440 839	(S)	(S)	(S)	24 950	28 970	50 936	78 469	59 630	54 529	135 490
Capital expenditures, other than land -----	394 569	(S)	(S)	(S)	28 362	32 523	53 088	63 081	49 037	47 794	113 608
End-of-year gross book value of depreciable assets -----	3 684 470	(S)	(S)	(S)	217 841	302 425	453 204	605 848	433 127	441 490	1 157 602
1987											
All employees** -----	329 877	(S)	(S)	(S)	(S)	36 476	43 938	65 856	48 667	32 894	54 695
Value of construction work -----	30 391 051	(S)	(S)	(S)	(S)	1 974 524	2 965 154	5 635 859	4 903 204	4 005 473	9 165 357
Value added†† -----	12 538 541	(S)	(S)	(S)	(S)	1 014 963	1 412 834	2 503 265	1 976 822	1 539 290	3 113 993
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	(S)	(S)	(S)	3	3	3	2	2	2	(Z)
Net value of construction work† -----	1	(S)	(S)	(S)	3	3	3	2	3	3	1
Capital expenditures, other than land -----	2	(S)	(S)	(S)	9	12	9	7	10	3	1

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	30 032 845	20 326 097	5 599 442	3 005 296	1	1	1	1
Building construction	23 367 764	16 549 765	4 569 117	2 248 881	1	1	2	2
Single-family houses	11 176 912	8 922 331	1 383 651	870 930	2	2	3	3
Single-family houses, detached	10 210 898	8 224 443	1 245 189	741 265	2	2	3	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	966 015	697 888	138 462	129 665	4	4	9	4
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	1 630 709	1 207 959	227 552	195 197	3	3	6	6
Other residential buildings, including hotels, motels, and tourist cabins	403 085	225 417	111 439	66 229	3	5	6	6
Office buildings	1 994 188	1 150 098	630 762	213 328	2	3	5	3
Other commercial buildings such as stores, restaurants, and automobile service stations	2 551 823	1 518 528	687 170	346 125	2	2	5	4
Industrial buildings and warehouses	1 980 952	1 168 256	503 987	308 709	3	4	3	2
Industrial buildings	1 437 189	805 378	375 279	256 532	3	6	3	2
Warehouses	543 763	362 878	128 708	52 177	3	3	7	5
Religious buildings	310 059	204 335	73 283	32 441	6	8	6	7
Educational buildings	1 511 516	1 056 804	377 143	77 569	2	2	4	5
Hospitals and institutional buildings	1 112 850	640 849	405 808	66 193	2	2	3	5
Amusement, social, and recreational buildings, indoors	236 585	165 404	50 217	20 963	5	5	14	18
Other nonresidential buildings	459 085	289 784	118 105	51 196	3	4	7	7
Nonbuilding construction	5 563 071	3 776 332	1 030 325	756 415	1	1	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 921 743	1 174 753	482 286	264 704	1	2	1	3
Outdoor swimming pools	363 078	287 603	37 541	37 934	8	9	14	17
Private driveways and parking areas	167 502	97 415	38 967	31 120	9	9	23	18
Bridges, tunnels, and elevated highways	375 773	324 649	33 366	17 758	2	1	3	24
Marine construction	162 258	108 133	33 247	20 878	4	4	4	13
Conservation and development construction	270 234	205 066	34 749	30 419	4	4	14	15
Power and communication transmission lines, towers, and related facilities	416 023	258 760	78 308	78 955	4	5	4	4
Sewers, water mains, and related facilities	716 956	557 156	85 230	74 571	2	3	6	4
Sewers, sewer lines, septic systems, and related facilities	401 672	303 392	52 134	46 146	3	3	7	5
Water mains and related facilities	315 284	253 764	33 096	28 425	3	3	11	5
Power plants	219 646	119 432	38 447	61 767	3	5	2	3
Sewage treatment and water treatment plants	259 885	194 906	53 611	11 368	4	3	12	13
Other nonbuilding construction	689 972	448 460	114 574	126 939	4	4	7	8
Construction work, n.s.k.	1 102 010	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
1987								
Value of construction work	30 391 051	22 862 530	3 818 975	2 194 339	1	1	1	1
Building construction	23 511 240	18 921 077	3 000 469	1 589 693	1	1	1	2
Single-family houses	10 552 538	9 120 395	881 234	550 909	2	2	3	3
Single-family houses, detached	8 704 488	7 417 294	810 855	476 339	2	2	3	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	1 848 049	1 703 101	70 379	74 569	4	4	6	7
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	2 162 704	1 919 860	114 915	127 928	2	3	6	5
Other residential buildings, including hotels, motels, and tourist cabins	1 071 443	845 493	129 798	96 151	2	2	10	6
Office buildings	2 404 623	1 817 636	424 575	162 411	1	1	3	3
Other commercial buildings such as stores, restaurants, and automobile service stations	2 734 494	2 022 766	469 989	241 738	2	2	3	4
Industrial buildings and warehouses	1 857 966	1 293 406	359 871	204 688	2	2	3	4
Industrial buildings	1 198 624	765 461	266 241	166 921	2	3	3	4
Warehouses	659 341	527 944	93 629	37 767	3	3	5	7
Religious buildings	296 476	222 141	46 077	28 256	3	3	5	16
Educational buildings	912 999	649 297	200 139	63 563	3	3	4	5
Hospitals and institutional buildings	821 547	517 367	245 782	58 396	2	2	3	5
Amusement, social, and recreational buildings, indoors	236 249	192 025	30 042	14 180	3	3	6	6
Other nonresidential buildings	460 201	320 691	98 047	41 473	5	5	8	8
Nonbuilding construction	5 364 606	3 941 453	818 506	604 645	1	1	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 807 353	1 223 875	391 044	192 433	1	2	1	4
Outdoor swimming pools	309 591	241 839	33 897	33 854	8	7	21	14
Private driveways and parking areas	214 118	142 897	34 761	36 459	6	6	7	13
Bridges, tunnels, and elevated highways	227 099	197 359	18 906	10 834	1	1	1	22
Marine construction	154 599	112 706	19 400	22 492	6	7	8	9
Power and communication transmission lines, towers, and related facilities	409 837	265 979	90 436	53 422	2	2	4	4
Sewers, water mains, and related facilities	820 447	706 148	52 710	61 587	2	2	6	9
Sewers, sewer lines, septic systems, and related facilities	460 314	397 523	28 168	34 621	3	3	7	12
Water mains and related facilities	360 133	308 625	24 542	26 965	3	3	6	12
Power plants	119 253	68 519	14 970	35 764	2	3	3	2
Sewage treatment and water treatment plants	347 094	273 112	46 136	27 846	3	3	12	6
Other nonbuilding construction	955 215	709 019	116 246	129 954	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	1 515 205	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	34 291	203 988	195 863	204 382	210 059	205 648	(Z)	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	5 435	17 623	16 471	17 321	18 577	18 121	2	3	3	4	4	4
1522	Other residential buildings -----	325	2 654	2 587	2 537	2 650	2 843	11	8	8	8	8	11
1531	Operative builders -----	1 263	4 600	4 525	4 685	4 714	4 476	5	3	5	3	3	3
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	310	3 512	3 553	3 189	3 537	3 769	10	4	5	5	4	5
1542	Nonresidential buildings, n.e.c. ----	1 872	13 885	13 350	14 388	14 157	13 647	4	3	3	3	3	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	480	12 010	11 103	12 200	12 402	12 334	7	2	2	2	2	2
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	32	1 476	1 420	1 495	1 509	1 480	10	4	5	4	3	4
1623	Water, sewer, and utility lines -----	561	9 400	9 076	9 273	9 565	9 685	5	2	2	2	2	2
1629	Heavy construction, n.e.c. -----	865	7 903	7 976	7 957	7 774	7 907	5	3	3	3	3	3
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	4 584	26 905	25 543	27 002	28 030	27 046	1	1	1	1	1	1
1721	Painting and paper hanging -----	1 977	7 612	7 810	7 518	7 877	7 242	3	4	4	4	5	5
1731	Electrical work -----	3 643	25 019	24 252	24 577	25 746	25 502	1	1	1	1	1	1
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	1 047	6 457	6 479	6 626	6 376	6 346	4	4	4	4	5	5
1742	Plastering, drywall, and insulation work -----	1 405	11 328	10 907	11 346	11 319	11 741	3	4	4	4	4	4
1743	Terrazzo, tile, marble, and mosaic work -----	793	2 537	2 586	2 565	2 537	2 458	5	6	7	6	7	6
175	Carpentry and floor work:												
1751	Carpentry -----	2 050	7 919	7 434	8 101	8 139	8 002	3	4	4	4	4	5
1752	Floor laying and other floor work --	448	1 418	1 389	1 421	1 483	1 378	6	6	6	6	6	6
1761	Roofing, siding, and sheet metal work -----	2 024	11 984	11 321	11 611	12 328	12 676	3	3	3	3	3	3
1771	Concrete work -----	1 470	8 324	8 091	8 860	8 445	7 901	4	4	4	4	4	4
1781	Water well drilling -----	224	788	758	799	804	790	8	7	7	7	8	7
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	225	2 209	1 913	2 420	2 289	2 215	9	10	8	11	11	11
1793	Glass and glazing work -----	303	1 285	1 244	1 240	1 311	1 346	8	6	6	6	7	7
1794	Excavation work -----	617	3 090	2 812	3 138	3 170	3 238	7	6	6	7	7	6
1795	Wrecking and demolition work -----	45	341	323	337	378	328	20	10	10	9	10	10
1796	Installing building equipment, n.e.c. -----	169	3 609	3 781	3 097	4 108	3 452	10	2	2	2	1	2
1799	Special trade contractors, n.e.c. ----	2 124	10 100	9 160	10 680	10 835	9 724	4	4	4	4	4	4

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.0	20.8	147.2	.190	.336	.281	.260	.015
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.8	17.3	231.0	.112	.356	.363	.031	.006
1522	Other residential buildings -----	12.5	21.2	258.4	.126	.233	.538	.041	.007
1531	Operative builders -----	9.5	25.1	893.4	.073	.297	.388	.010	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	16.5	27.5	279.3	.143	.350	.394	.039	.014
1542	Nonresidential buildings, n.e.c. -----	11.0	24.6	303.6	.120	.208	.587	.028	.009
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	30.6	23.0	156.0	.180	.334	.275	.221	.033
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	55.8	25.3	211.8	.144	.411	.342	.123	.039
1623	Water, sewer, and utility lines -----	20.3	21.1	100.6	.255	.325	.169	.246	.027
1629	Heavy construction, n.e.c. -----	11.6	24.6	147.2	.213	.319	.188	.173	.045
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.1	21.6	108.2	.273	.432	.090	.535	.015
1721	Painting and paper hanging -----	4.8	16.5	61.2	.336	.294	.077	.534	.023
1731	Electrical work -----	8.8	21.8	88.0	.316	.427	.038	.625	.015
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6.9	16.3	53.8	.340	(D)	(D)	.742	.015
1742	Plastering, drywall, and insulation work -----	10.0	19.6	83.4	.290	.373	.151	.759	.011
1743	Terrazzo, tile, marble, and mosaic work -----	4.0	16.4	69.5	.294	.450	.061	.648	.010
175	Carpentry and floor work:								
1751	Carpentry -----	4.8	17.9	79.7	.277	.347	.135	.748	.021
1752	Floor laying and other floor work -----	4.5	18.8	130.1	.204	.476	.115	.539	.012
1761	Roofing, siding, and sheet metal work -----	7.8	18.1	95.2	.251	.433	.097	.394	.014
1771	Concrete work -----	6.9	18.2	75.0	.297	.355	.085	.686	.022
1781	Water well drilling -----	4.6	20.8	109.5	.250	.449	.031	.204	.010
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	12.1	21.2	87.3	.301	.405	.124	.756	.026
1793	Glass and glazing work -----	6.4	19.7	108.0	.275	.524	*.030	.673	.024
1794	Excavation work -----	6.2	21.0	99.1	.261	.328	.121	.594	.041
1795	Wrecking and demolition work -----	10.5	18.0	102.6	.242	(D)	.132	.164	.046
1796	Installing building equipment, n.e.c. -----	27.3	25.3	97.5	.331	.226	(D)	.216	.011
1799	Special trade contractors, n.e.c. -----	6.4	18.7	92.7	.272	.356	.143	.361	.021

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	MIAMI-FORT LAUDERDALE, FL CMSA											
15,16, 17	Construction industries	(S)	61 526	1 337 283	7 053 611	4 978 041	2 876 623	2 181 609	2 075 570	91 650	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	(S)	81 799	605 275	402 665	237 320	(S)	202 610	4 820	(S)	7
1522	Other residential buildings	(S)	1 294	25 382	213 749	108 324	64 901	46 431	105 425	(S)	18	12
1531	Operative builders	(S)	2 854	69 993	1 021 165	599 183	352 862	262 775	421 982	3 350	3	8
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	81	539	13 309	85 606	(D)	25 192	20 775	(D)	452	13	(D)
1542	Nonresidential buildings, n.e.c.	472	5 432	144 727	1 129 374	456 693	257 991	205 380	672 681	4 363	5	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	3 360	81 754	483 412	336 867	202 876	143 793	146 546	18 444	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	11	1 243	32 546	237 354	154 387	52 950	102 984	82 967	7 021	2	1
1623	Water, sewer, and utility lines	(S)	2 556	54 639	221 567	185 390	114 670	70 780	36 177	4 168	4	5
1629	Heavy construction, n.e.c.	119	1 562	42 734	195 761	147 929	92 124	60 233	47 832	7 938	6	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 074	8 593	191 013	747 778	644 491	334 844	316 501	103 286	8 821	3	3
1721	Painting and paper hanging	(S)	1 984	30 940	91 731	80 010	55 426	24 639	11 721	(S)	13	10
1731	Electrical work	975	7 099	163 731	518 296	504 689	292 691	219 035	13 607	7 743	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	1 063	22 766	71 979	64 180	41 940	22 265	7 799	(D)	5	11
1742	Plastering, drywall, and insulation work	361	2 764	57 662	233 624	187 461	102 348	85 935	46 163	2 540	7	7
1743	Terrazzo, tile, marble, and mosaic work	200	726	12 451	37 927	36 009	20 082	16 523	1 918	814	8	7
175	Carpentry and floor work:											
1751	Carpentry	(S)	2 542	50 866	176 006	154 096	95 692	60 448	21 910	2 140	10	9
1752	Floor laying and other floor work	(S)	751	15 416	68 163	61 756	30 608	31 716	6 406	*1 072	10	14
1761	Roofing, siding, and sheet metal work	(S)	3 362	64 630	287 773	250 412	124 968	126 463	37 360	3 407	6	6
1771	Concrete work	(S)	2 152	39 085	149 753	130 009	84 233	47 204	19 744	2 508	9	10
1781	Water well drilling	(S)	(S)	(S)	(D)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	48	899	17 113	48 651	45 028	32 388	12 834	3 623	358	24	18
1793	Glass and glazing work	80	444	7 113	26 960	26 694	13 031	14 190	266	*337	12	11
1794	Excavation work	76	524	14 512	61 716	48 124	35 465	14 944	13 592	1 721	16	13
1795	Wrecking and demolition work	11	112	2 013	(D)	5 732	4 444	1 288	(D)	221	13	28
1796	Installing building equipment, n.e.c.	51	1 689	38 225	138 548	(D)	95 062	40 079	(D)	(D)	2	(D)
1799	Special trade contractors, n.e.c.	(S)	3 283	60 958	189 070	162 771	108 749	58 174	26 300	5 385	6	7
	Fort Lauderdale, FL PMSA											
15,16, 17	Construction industries	3 565	28 171	638 317	3 242 896	2 326 973	1 333 169	1 030 560	915 923	44 618	2	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	(S)	33 491	246 603	161 116	101 754	(S)	85 486	(S)	(S)	10
1522	Other residential buildings	(S)	602	13 759	112 948	58 438	44 308	16 496	54 511	(S)	34	17
1531	Operative builders	99	1 214	31 885	436 538	262 008	150 539	119 167	174 530	1 093	6	6
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	24	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(S)	(S)	(D)
1542	Nonresidential buildings, n.e.c.	203	2 413	63 110	495 837	202 051	111 180	94 841	293 786	1 945	9	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	1 443	36 582	205 472	139 275	65 458	75 220	66 197	7 624	7	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	3	386	10 519	71 581	47 984	22 093	26 892	23 597	(D)	(Z)	(Z)
1623	Water, sewer, and utility lines	78	1 294	32 739	127 682	102 192	50 288	51 926	25 489	3 293	6	3
1629	Heavy construction, n.e.c.	50	671	20 056	86 065	73 446	50 294	23 742	12 619	4 752	6	5

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	MIAMI-FORT LAUDERDALE, FL CMSA—Con.											
	Fort Lauderdale, FL PMSA—Con.											
	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	508	3 622	84 666	332 656	292 774	155 764	141 292	39 882	(S)	4	4
1721	Painting and paper hanging	211	898	15 860	43 452	39 267	25 430	13 866	(S)	(S)	9	8
1731	Electrical work	471	3 083	70 660	242 424	236 173	135 559	103 226	6 251	3 338	4	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	773	19 189	63 016	(D)	36 433	19 015	(D)	(D)	5	(D)
1742	Plastering, drywall, and insulation work	184	1 469	32 645	127 974	99 902	56 532	44 179	28 072	1 436	9	10
1743	Terrazzo, tile, marble, and mosaic work	101	496	8 426	26 467	(D)	13 552	11 845	(D)	595	9	(D)
175	Carpentry and floor work:											
1751	Carpentry	185	1 505	30 757	94 348	84 399	53 472	31 454	(S)	1 264	12	10
1752	Floor laying and other floor work	(S)	464	8 724	39 271	36 041	17 673	18 742	3 230	(S)	12	18
1761	Roofing, siding, and sheet metal work	210	1 753	36 201	184 195	155 631	74 903	81 550	28 564	2 813	8	10
1771	Concrete work	114	1 273	23 841	92 304	77 143	48 812	29 714	15 162	1 872	12	13
1781	Water well drilling	(S)	(S)	(S)	(D)	(D)	(S)	(D)	(D)	(D)	(S)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	35	275	5 589	15 236	13 064	9 281	3 977	2 172	81	20	15
1793	Glass and glazing work	44	221	4 357	14 772	14 627	7 056	7 889	145	*227	15	13
1794	Excavation work	57	365	11 286	49 465	36 111	27 499	10 550	13 355	1 503	20	15
1795	Wrecking and demolition work	6	52	1 171	(D)	(D)	*2 867	(D)	(D)	(D)	28	(D)
1796	Installing building equipment, n.e.c.	(S)	444	10 399	30 323	(D)	17 134	10 468	(D)	100	3	(D)
1799	Special trade contractors, n.e.c.	(S)	1 553	29 364	85 502	72 463	49 942	26 360	13 039	3 582	9	8
	Miami, FL PMSA											
15,16,17	Construction industries	(S)	33 355	698 966	3 810 715	2 651 068	1 543 454	1 151 049	1 159 647	47 032	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	(S)	(S)	358 672	241 548	(S)	112 241	117 123	3 780	(S)	10
1522	Other residential buildings	(S)	692	11 623	100 801	49 886	20 593	29 935	50 914	(S)	17	18
1531	Operative builders	(S)	1 640	38 108	584 627	337 175	202 323	143 608	247 453	2 257	3	14
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	57	407	11 130	74 028	36 264	21 498	16 588	37 763	304	15	17
1542	Nonresidential buildings, n.e.c.	269	3 018	81 617	633 536	254 642	146 811	110 539	378 895	2 418	6	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	41	1 917	45 172	277 940	197 591	137 418	68 573	80 349	10 820	5	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	8	857	22 027	165 773	106 403	30 857	76 092	59 370	(D)	3	2
1623	Water, sewer, and utility lines	(S)	1 262	21 900	93 886	83 198	64 381	18 854	10 688	(S)	5	10
1629	Heavy construction, n.e.c.	(S)	891	22 678	109 696	74 483	(S)	36 491	35 214	(S)	9	6
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	565	4 971	106 347	415 121	351 717	179 080	175 209	63 404	6 294	4	4
1721	Painting and paper hanging	(S)	1 086	15 080	48 279	40 743	29 996	10 773	7 536	257	22	17
1731	Electrical work	(S)	4 017	93 071	275 872	268 517	157 132	115 808	(S)	(S)	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	(S)	(S)	(S)	(D)	5 507	(S)	(D)	(S)	(S)	(D)
1742	Plastering, drywall, and insulation work	(S)	1 296	25 018	105 650	87 559	45 817	41 756	(S)	1 104	12	11
1743	Terrazzo, tile, marble, and mosaic work	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	220	(S)	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	1 036	20 109	81 657	69 698	42 221	28 993	11 960	876	18	16
1752	Floor laying and other floor work	47	(S)	6 692	28 891	25 715	12 936	12 974	3 176	*811	(S)	21
1761	Roofing, siding, and sheet metal work	(S)	(S)	28 429	103 578	94 782	50 065	44 913	8 796	(S)	(S)	8
1771	Concrete work	(S)	880	15 243	(S)	(S)	35 422	(S)	(S)	636	11	(S)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	MIAMI-FORT LAUDERDALE, FL CMSA—Con.											
	Miami, FL PMSA—Con.											
15,16, 17	Construction industries—Con.											
17	Special trade contractors—Con.											
1781	Water well drilling	8	(S)	*1 041	(D)	(D)	*2 112	(D)	(D)	(D)	(S)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	13	623	11 524	33 415	31 964	23 107	8 857	1 451	277	33	24
1793	Glass and glazing work	35	222	2 756	12 189	12 068	5 975	6 301	(S)	110	19	19
1794	Excavation work	19	159	3 227	12 250	12 013	7 966	4 393	237	(S)	26	25
1795	Wrecking and demolition work	(S)	(S)	(S)	(D)	(D)	(S)	(D)	(D)	(D)	(S)	(D)
1796	Installing building equipment, n.e.c. ..	26	1 245	27 826	108 225	107 491	77 928	29 611	734	(D)	3	2
1799	Special trade contractors, n.e.c.	(S)	1 731	31 594	103 569	90 308	58 807	31 815	*13 261	(S)	8	11
	JACKSONVILLE, FL MSA											
15,16, 17	Construction industries	2 266	22 457	513 920	2 692 260	1 992 262	1 049 433	972 990	699 998	26 991	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	327	1 613	27 771	259 008	164 605	84 059	85 109	94 402	2 124	14	15
1522	Other residential buildings	*27	192	4 058	33 059	14 562	8 704	5 986	18 497	(D)	28	29
1531	Operative builders	75	430	11 837	268 533	174 509	82 647	93 204	94 024	592	17	16
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	34	2 011	66 011	504 167	340 803	122 112	226 440	163 363	2 292	7	7
1542	Nonresidential buildings, n.e.c.	(S)	1 364	31 167	257 017	122 374	(S)	57 867	134 643	(S)	12	10
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	27	1 034	22 044	118 717	93 362	44 265	50 668	25 355	3 857	6	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	5	*110	2 091	7 429	6 305	2 051	4 254	*1 124	—	48	21
1623	Water, sewer, and utility lines	27	594	13 995	62 344	50 461	37 180	13 616	11 883	(S)	17	16
1629	Heavy construction, n.e.c.	84	1 209	32 649	189 901	134 147	78 405	57 145	55 754	3 539	7	6
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	296	3 489	80 062	287 367	247 790	140 384	109 306	39 577	2 073	3	3
1721	Painting and paper hanging	138	880	16 257	55 200	47 992	31 485	17 211	7 208	449	8	17
1731	Electrical work	207	3 269	84 226	235 917	227 756	143 950	86 961	8 161	2 187	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	(S)	9 468	27 693	26 455	17 950	8 598	(S)	(S)	(S)	16
1742	Plastering, drywall, and insulation work	79	973	21 294	69 091	56 503	33 318	24 369	12 588	880	5	7
1743	Terrazzo, tile, marble, and mosaic work	43	146	2 509	9 822	9 355	4 561	5 241	467	(S)	18	16
175	Carpentry and floor work:											
1751	Carpentry	(S)	1 011	16 811	68 887	57 105	32 737	25 821	11 781	(S)	11	10
1752	Floor laying and other floor work ..	(S)	116	2 253	7 044	6 489	4 153	2 454	*555	(S)	13	11
1761	Roofing, siding, and sheet metal work	(S)	1 148	21 229	68 301	63 289	32 736	30 611	5 012	916	10	9
1771	Concrete work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1781	Water well drilling	12	56	1 363	4 538	4 536	2 427	2 109	*2	(D)	9	11
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	17	331	8 363	41 505	(D)	14 574	22 408	(D)	157	1	(D)
1793	Glass and glazing work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	*41	(S)	(S)
1794	Excavation work	29	132	2 892	10 964	(D)	4 472	5 140	(D)	443	6	(D)
1795	Wrecking and demolition work	8	44	1 019	4 510	(D)	4 272	473	(D)	113	(Z)	(D)
1796	Installing building equipment, n.e.c. ..	*19	238	5 295	13 303	(D)	9 657	3 432	(D)	(D)	13	(D)
1799	Special trade contractors, n.e.c.	126	783	15 303	48 888	42 853	23 816	19 754	6 035	3 301	15	13

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	ORLANDO, FL MSA											
15,16,17	Construction industries	3 421	32 430	701 135	3 819 073	2 634 008	1 458 611	1 250 741	1 185 065	49 413	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	542	2 427	43 009	382 210	235 438	124 037	121 336	146 772	2 795	16	15
1522	Other residential buildings	21	307	10 251	109 830	40 318	19 059	22 543	69 512	564	8	10
1531	Operative builders	(S)	2 318	61 156	661 781	415 004	203 260	241 146	246 777	3 205	3	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(S)	(S)	43 371	(S)	(S)	(S)	16 517	551	(S)	(S)
1542	Nonresidential buildings, n.e.c.	184	3 124	80 235	705 549	276 662	155 091	124 752	428 887	1 834	5	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	48	1 964	44 917	262 113	175 968	105 245	75 797	86 144	10 336	7	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	(S)	1 145	25 372	102 836	80 928	45 632	35 508	21 908	4 873	6	4
1629	Heavy construction, n.e.c.	115	1 022	21 769	124 683	97 908	62 456	35 916	26 775	(S)	11	11
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	425	4 235	99 321	345 641	312 933	175 240	144 372	32 708	6 387	3	4
1721	Painting and paper hanging	191	961	15 412	47 368	44 521	30 978	13 778	*2 846	(S)	14	10
1731	Electrical work	353	4 252	84 409	275 739	258 022	128 668	133 385	17 717	3 537	4	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	131	991	16 462	47 207	44 736	28 443	16 497	2 470	707	10	8
1742	Plastering, drywall, and insulation work	150	1 980	43 893	142 497	115 511	72 430	53 215	*26 986	687	9	9
1743	Terrazzo, tile, marble, and mosaic work	(S)	164	(D)	9 982	(D)	(D)	4 684	(D)	120	7	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	(S)	14 723	68 982	53 445	29 504	24 530	15 537	1 152	(S)	13
1752	Floor laying and other floor work	(S)	(D)	3 098	13 898	12 436	6 233	6 233	*1 462	*55	(D)	19
1761	Roofing, siding, and sheet metal work	249	2 216	41 658	168 057	151 635	81 673	70 114	16 422	2 506	10	10
1771	Concrete work	175	1 250	23 417	80 092	77 280	45 642	31 720	2 812	2 072	11	9
1781	Water well drilling	21	153	3 518	11 625	11 322	6 998	(D)	303	258	24	18
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	32	283	4 587	14 176	13 647	7 148	6 509	529	*44	17	18
1793	Glass and glazing work	30	261	6 077	23 299	22 262	10 618	13 377	*1 037	*55	12	12
1794	Excavation work	80	407	7 481	30 941	28 177	16 412	11 903	2 763	607	17	18
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	(S)	228	6 259	(D)	(D)	14 189	4 828	(D)	(D)	20	(D)
1799	Special trade contractors, n.e.c.	(S)	1 220	27 289	113 566	101 340	60 007	42 022	12 226	3 143	10	11
	TAMPA-ST. PETERSBURG—CLEARWATER, FL MSA											
15,16,17	Construction industries	4 773	39 916	809 754	4 242 494	3 067 607	1 688 212	1 442 645	1 174 887	56 136	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	596	3 974	64 614	639 359	416 719	165 204	254 336	222 639	2 716	5	5
1522	Other residential buildings	55	277	5 209	44 588	(D)	16 686	8 404	(D)	938	17	(D)
1531	Operative builders	150	1 497	33 355	477 413	267 614	151 168	124 408	209 799	(S)	5	7
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	34	(S)	(S)	80 831	36 679	16 872	20 018	44 152	(S)	(S)	10
1542	Nonresidential buildings, n.e.c.	285	2 584	69 629	637 537	249 167	117 566	146 371	388 370	3 683	6	11
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	1 873	45 118	237 345	168 822	110 267	61 953	68 523	3 917	3	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	*4	(D)	3 760	(D)	(D)	8 843	(D)	15 564	(D)	(D)	(D)
1623	Water, sewer, and utility lines	94	2 045	41 450	146 205	119 226	73 850	51 346	26 980	6 062	5	5
1629	Heavy construction, n.e.c.	95	1 649	44 549	232 554	202 112	125 971	84 272	30 443	5 477	7	3

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	TAMPA-ST. PETERSBURG-CLEARWATER, FL MSA—Con.											
	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	655	5 598	118 160	421 310	391 303	208 321	187 574	30 007	5 945	3	3
1721	Painting and paper hanging	317	1 416	22 363	69 079	65 301	46 240	19 483	3 779	2 514	12	10
1731	Electrical work	443	5 205	110 451	355 198	342 997	201 023	145 721	12 201	3 671	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	192	1 000	14 751	47 483	45 118	29 832	15 570	*2 365	517	10	14
1742	Plastering, drywall, and insulation work	209	2 471	46 988	139 161	128 197	71 861	56 594	10 964	3 477	7	6
1743	Terrazzo, tile, marble, and mosaic work	115	535	9 320	30 159	28 477	14 824	14 130	1 681	*245	14	15
175	Carpentry and floor work:											
1751	Carpentry	(S)	1 194	21 544	(S)	(S)	36 553	(S)	(S)	(S)	11	(S)
1752	Floor laying and other floor work	(S)	260	5 658	38 768	32 021	12 505	19 517	6 747	(D)	17	16
1761	Roofing, siding, and sheet metal work	350	2 096	37 661	153 427	135 150	68 956	66 823	18 276	2 051	8	7
1771	Concrete work	185	1 098	17 058	64 610	60 887	40 328	23 644	3 723	(S)	11	11
1781	Water well drilling	29	156	(D)	11 414	11 270	(D)	5 315	144	288	18	15
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	63	499	11 247	34 935	29 033	19 931	9 997	5 902	1 122	16	14
1793	Glass and glazing work	37	209	4 267	14 883	14 735	7 064	8 436	148	55	19	22
1794	Excavation work	(S)	664	13 909	47 039	40 168	22 476	17 735	6 871	2 804	18	11
1795	Wrecking and demolition work	*11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	26	364	7 878	(D)	(D)	16 157	7 050	(D)	262	9	(D)
1799	Special trade contractors, n.e.c.	356	2 600	44 328	177 395	142 777	86 963	59 566	34 618	2 376	11	7
15,16, 17	WEST PALM BEACH-BOCA RATON, FL MSA											
	Construction industries	2 934	21 281	459 936	2 300 232	1 713 403	941 927	809 112	586 829	21 415	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	494	2 968	53 655	376 274	245 740	115 365	138 215	130 534	2 729	5	10
1522	Other residential buildings	30	250	6 124	*25 934	15 304	8 492	*6 812	*10 630	94	38	38
1531	Operative builders	(S)	1 520	44 510	470 178	288 322	190 139	109 545	181 856	1 439	4	6
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	34	253	5 524	44 827	17 875	10 442	7 630	26 951	262	28	21
1542	Nonresidential buildings, n.e.c.	161	1 366	33 708	259 008	145 308	57 640	90 554	113 700	1 936	10	10
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	49	775	18 387	87 297	64 466	17 823	51 468	22 831	2 583	7	7
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	(S)	(S)	(S)	62 841	53 037	(S)	17 481	9 804	(S)	(S)	9
1629	Heavy construction, n.e.c.	(S)	492	11 646	47 113	42 920	23 785	20 337	4 194	(S)	10	13
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	388	2 454	59 156	197 272	183 953	104 134	82 603	(S)	2 212	4	4
1721	Painting and paper hanging	174	923	16 896	44 156	42 238	27 243	15 009	1 918	579	8	7
1731	Electrical work	361	2 453	55 748	182 168	178 896	103 997	77 024	(S)	1 183	5	9
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	86	588	9 299	29 103	27 872	18 494	9 385	1 230	325	21	12
1742	Plastering, drywall, and insulation work	110	990	21 691	79 950	63 592	36 398	27 445	16 358	(S)	9	12
1743	Terrazzo, tile, marble, and mosaic work	(S)	283	5 425	17 592	15 728	7 752	8 112	*1 864	*181	21	20
175	Carpentry and floor work:											
1751	Carpentry	207	965	19 509	70 420	55 048	31 258	23 934	(S)	591	13	14
1752	Floor laying and other floor work	(S)	98	1 845	9 298	8 205	3 914	4 410	*1 093	(S)	20	22
1761	Roofing, siding, and sheet metal work	133	1 392	26 276	99 803	93 439	52 128	41 530	6 364	2 157	11	8
1771	Concrete work	(S)	1 058	19 434	67 141	58 110	32 260	26 084	9 031	972	11	9

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	WEST PALM BEACH-BOCA RATON, FL MSA—Con.											
	Construction industries—Con.											
15,16, 17	Special trade contractors—Con.											
1781	Water well drilling -----	9	(D)	(D)	(D)	(D)	(D)	(D)	36	77	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	12	169	3 540	10 047	9 439	6 631	2 808	*608	*364	22	18
1793	Glass and glazing work -----	44	260	6 694	23 355	23 061	10 492	13 034	294	168	11	11
1794	Excavation work -----	(S)	(S)	2 112	9 763	8 530	5 411	(S)	*1 233	(S)	(S)	22
1795	Wrecking and demolition work -----	(S)	65	(D)	2 303	(D)	1 393	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c. -	(S)	111	1 386	(D)	(D)	3 069	993	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c. -----	167	955	19 460	75 731	62 104	35 947	28 528	13 627	(S)	15	9

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Georgia

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Georgia. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 56,289 establishments in this State operating in the construction industries. These establishments accounted for \$15.4 billion in total dollar value of business done.

Most of the 56,289 construction establishments were small. Of the total, 42,708 were nonemployers, and over half of the employer establishments had less than 5 employees. The 5,391 construction establishments with 5 employees or more, while representing only 10 percent of all establishments, accounted for more than 77 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$14.0 billion in total dollar value of business done. Of this amount, \$13.8 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$3.9 billion, leaving net value of construction work of \$9.8 billion. In addition, these establishments paid out \$5.1 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$5.4 billion. (See Introduction and appendixes for explanation of terms.)

There were 13,581 establishments with total employment averaging 123,888 during the year. Total payroll for 1992 was \$2.7 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 42,708 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$1.4 billion. Most of these establishments, about 81 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

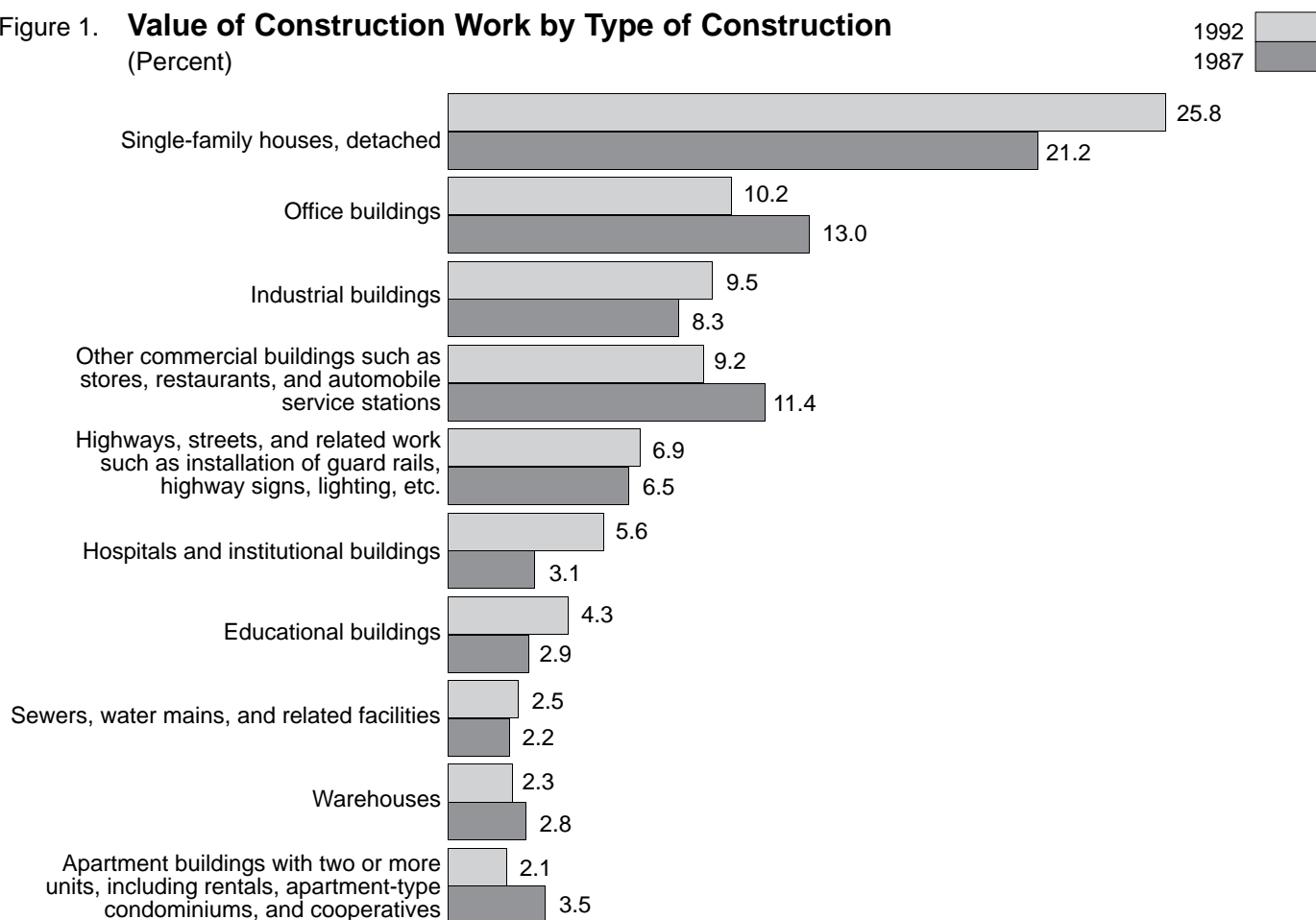


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

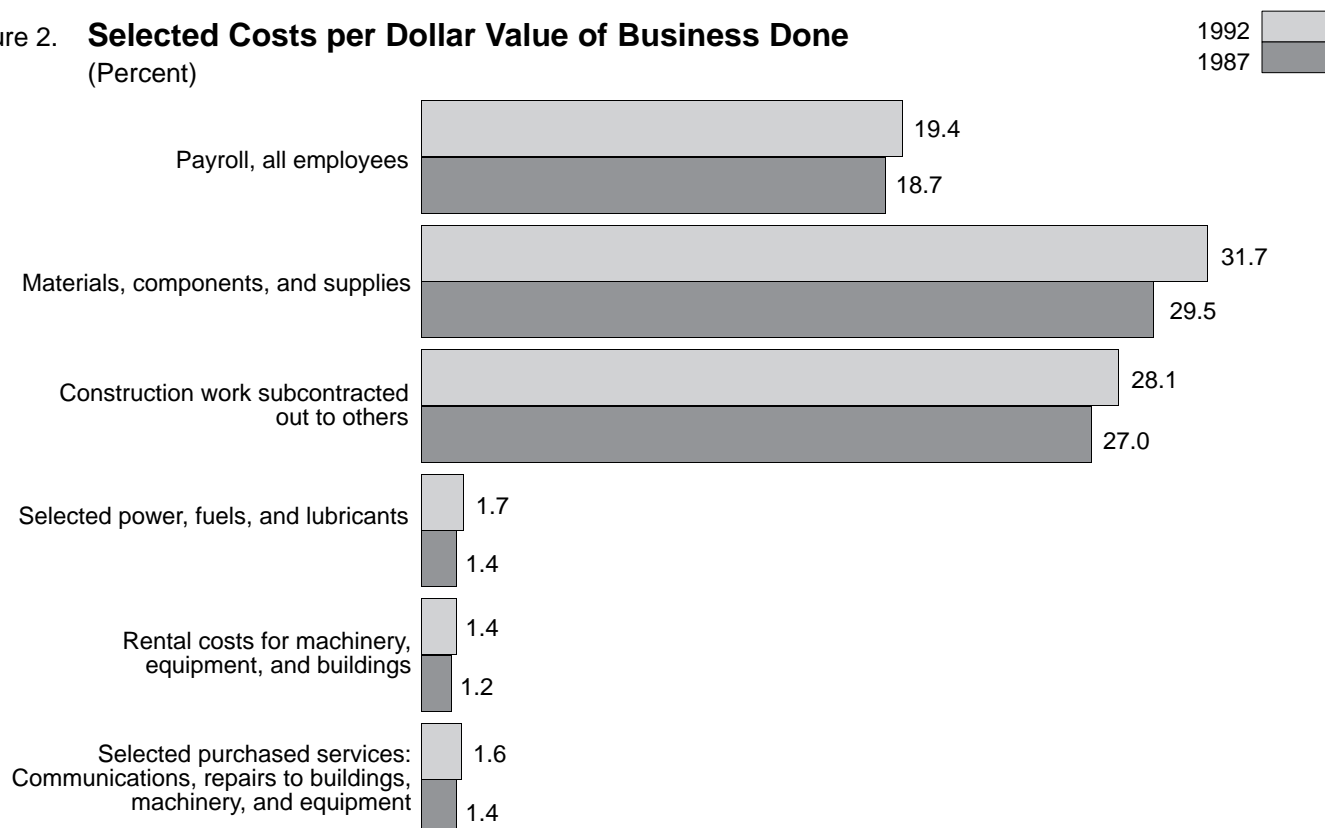


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	56 289	46 046	123 888	15 401 575	42 708	41 280	1 443 127	13 581	4 766	123 888	13 958 448	1	1
15	Building construction—General contractors and operative builders ----	11 066	7 258	30 836	7 212 733	7 154	6 241	640 454	3 912	1 017	30 836	6 572 279	1	2
16	Heavy construction other than building construction—contractors -----	1 909	1 035	22 335	2 358 795	824	788	31 631	1 085	(S)	22 335	2 327 164	2	1
17	Special trade contractors -----	43 314	37 753	70 718	5 830 047	34 730	34 251	771 042	8 584	3 502	70 718	5 059 005	1	1
1711	Plumbing, heating, and air-conditioning --	5 161	3 806	17 291	1 538 749	3 132	3 052	95 327	2 029	754	17 291	1 443 422	2	2
1731	Electrical work -----	4 002	2 912	13 887	1 043 965	2 595	2 513	52 222	1 407	399	13 887	991 743	2	2
	1987													
15, 16, 17	Construction industries² -----	60 192	48 455	149 698	18 039 517	46 291	45 125	2 970 224	13 901	3 330	149 698	15 069 293	1	1
15	Building construction—General contractors and operative builders ----	15 183	10 630	38 782	8 304 395	10 939	9 881	1 240 223	4 244	749	38 782	7 064 172	1	1
16	Heavy construction other than building construction—contractors -----	1 927	1 001	23 220	2 545 673	767	755	86 214	1 160	246	23 220	2 459 459	1	1
17	Special trade contractors -----	41 433	35 483	85 813	6 303 808	33 234	33 179	1 194 747	8 199	2 304	85 813	5 109 061	1	1
1711	Plumbing, heating, and air-conditioning --	5 096	3 643	19 379	1 608 573	3 154	3 144	159 391	1 942	499	19 379	1 449 182	2	2
1731	Electrical work -----	3 472	2 473	16 633	1 106 190	2 254	2 236	84 239	1 218	237	16 633	1 021 951	1	1

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	13 581	123 888	95 113	2 712 171	1 860 397	13 761 145	9 840 063	5 372 566
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	2 014	7 665	5 372	128 817	78 249	1 151 671	771 847	382 047
1522	Other residential buildings -----	115	1 389	798	30 000	18 557	234 518	127 609	69 322
1531	Operative builders -----	739	3 573	1 556	99 276	28 159	1 486 249	974 894	386 648
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	214	3 453	2 646	91 635	60 132	525 246	290 159	165 241
1542	Nonresidential buildings, n.e.c. -----	831	14 756	10 350	370 607	215 507	3 082 659	1 306 529	635 369
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction -----	264	8 445	7 116	169 464	127 661	984 560	740 535	399 994
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	27	1 002	802	22 065	15 706	110 442	85 024	53 428
1623	Water, sewer, and utility lines -----	352	6 077	4 935	136 427	102 783	546 358	483 214	285 575
1629	Heavy construction, n.e.c. -----	442	6 811	5 392	173 416	132 213	647 813	525 835	320 152
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	2 029	17 291	13 017	392 050	271 382	1 435 736	1 260 720	677 517
1721	Painting and paper hanging -----	628	4 153	3 516	79 151	60 857	237 998	202 945	146 136
1731	Electrical work -----	1 407	13 887	10 823	337 111	246 409	982 595	943 510	556 079
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	461	3 317	3 051	51 414	44 132	149 427	131 894	82 341
1742	Plastering, drywall, and insulation work -----	398	5 010	4 202	98 086	77 326	352 649	325 415	185 109
1743	Terrazzo, tile, marble, and mosaic work -----	164	1 021	825	20 127	15 204	74 139	68 147	36 759
175	Carpentry and floor work:								
1751	Carpentry -----	772	3 138	2 621	46 288	36 899	171 521	151 768	88 455
1752	Floor laying and other floor work -----	204	1 016	753	19 042	12 958	97 764	87 071	47 377
1761	Roofing, siding, and sheet metal work -----	593	4 977	3 951	99 235	66 105	330 874	307 522	170 873
1771	Concrete work -----	528	5 112	4 301	96 128	73 349	349 755	314 499	193 891
1781	Water well drilling -----	89	401	297	7 014	4 629	30 260	29 861	16 943
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	116	1 580	1 276	32 952	23 507	109 573	91 220	63 398
1793	Glass and glazing work -----	134	1 097	763	24 702	16 401	89 124	87 330	43 293
1794	Excavation work -----	300	1 608	1 353	34 627	26 998	129 447	114 066	80 091
1795	Wrecking and demolition work -----	*18	116	90	1 587	1 056	4 946	4 122	4 311
1796	Installing building equipment, n.e.c. -----	111	2 270	1 722	51 559	36 921	157 803	150 874	102 391
1799	Special trade contractors, n.e.c. -----	631	4 724	3 584	99 392	67 295	288 020	263 450	179 826

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
4 664 801	3 921 082	3 275 086	189 150	185 957	1 798 389	149 698	14 405 566	5 963 428	1	1	4	15, 16, 17
												15
405 881	379 824	23 031	6 545	8 197	49 623	8 816	(D)	308 826	4	6	19	152
59 525	106 908	6 311	1 807	(S)	(S)	1 842	266 475	88 981	9	12	(S)	1521
615 597	511 356	*7 093	2 483	10 157	68 983	5 754	(D)	408 852	6	6	34	1531
136 849	235 087	64 583	7 087	4 315	34 718	5 219	674 156	240 091	6	4	17	154
706 496	1 776 129	51 362	41 859	12 799	151 554	17 151	3 286 314	765 438	2	2	7	1542
												16
365 730	244 025	152 461	17 064	30 489	368 391	8 121	913 408	417 591	2	2	4	1611
31 612	25 417	30 420	888	3 913	36 247	1 212	122 850	54 093	11	6	10	162
204 540	63 144	87 526	13 940	19 347	181 507	7 813	846 225	508 260	3	3	13	1622
211 570	121 977	136 948	20 097	17 431	162 436	6 074	527 124	267 658	3	3	15	1623
												17
590 889	175 017	702 652	18 720	15 916	156 712	19 379	1 437 158	680 239	2	2	8	1711
57 185	35 053	134 103	4 643	2 836	29 687	4 142	183 033	128 760	5	6	16	1721
396 579	39 085	556 843	15 249	11 505	119 381	16 633	1 014 997	591 669	2	2	11	1731
49 595	17 533	112 355	2 472	2 631	14 255	4 081	122 890	81 550	6	8	30	174
147 052	27 234	281 909	3 085	3 278	31 332	6 337	371 905	205 098	4	4	21	1742
(D)	(S)	43 718	572	537	4 711	827	47 297	25 821	12	17	25	1743
64 941	19 753	91 104	2 195	2 067	14 737	7 477	173 535	97 090	8	9	33	175
42 507	10 693	40 956	(S)	(S)	6 749	825	69 643	33 805	15	12	(S)	1751
140 263	23 352	154 032	5 411	3 910	48 890	6 156	361 902	200 241	4	4	14	1761
125 055	35 256	231 098	7 067	15 068	104 959	5 805	349 706	195 278	4	5	25	1771
12 918	398	1 735	*323	(S)	23 673	384	24 045	12 573	13	17	(S)	1781
37 483	18 353	65 070	3 547	1 652	17 992	2 443	188 780	123 074	8	6	16	179
47 327	1 794	55 760	1 041	683	7 816	1 237	101 860	49 726	10	9	39	1791
36 179	15 381	64 564	3 945	5 585	80 115	1 868	128 976	88 334	8	8	25	1793
(D)	824	1 527	245	99	2 854	198	13 068	11 652	19	19	(Z)	1794
54 435	6 929	45 793	2 171	1 206	17 671	1 824	143 324	103 427	2	1	(Z)	1795
90 650	24 570	132 131	6 190	7 686	56 723	6 197	302 106	174 610	5	5	16	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	13 581	13 901	10 126	10 928	1	1	2	2
Proprietors and working partners	4 766	3 330	3 430	6 194	2	4	4	4
All employees**	123 888	149 698	106 130	100 599	1	1	1	1
Construction workers:								
March	90 860	113 644	85 126	78 290	1	1	1	1
May	97 188	119 952	87 926	87 454	1	1	1	1
August	98 126	124 721	91 469	92 234	1	1	1	1
November	94 278	117 453	85 054	87 830	1	1	1	1
Average	95 113	118 942	88 225	86 505	1	1	1	1
Other employees:								
March	29 092	30 509	17 638	13 589	1	1	2	2
May	28 324	30 316	(NA)	(NA)	1	1	(NA)	(NA)
August	28 665	31 221	(NA)	(NA)	1	1	(NA)	(NA)
November	29 021	30 975	(NA)	(NA)	1	1	(NA)	(NA)
Average	28 776	30 755	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	2 712 171	2 822 054	1 548 390	1 000 898	(Z)	(Z)	1	1
Payroll, construction workers	1 860 397	1 973 385	1 186 662	788 355	1	1	1	1
Payroll, other employees	851 774	848 669	361 728	212 543	1	1	1	1
First-quarter payroll, all employees	615 216	633 141	351 394	208 261	1	1	1	1
Fringe benefits, all employees	554 959	515 576	274 710	158 295	1	1	1	1
Legally required expenditures	392 105	366 502	212 538	105 325	1	1	1	1
Voluntary expenditures	162 854	149 074	62 172	52 971	1	1	1	1
Dollar value of business done	13 958 448	15 069 293	7 080 992	4 379 392	1	1	1	1
Value of construction work	13 761 145	14 405 566	6 853 334	4 216 749	1	1	1	1
Value of construction work subcontracted in from others	3 275 086	3 325 502	1 554 665	929 059	2	2	4	(Z)
Other business receipts	197 303	279 649	141 669	162 642	5	3	2	4
Net value of construction†	9 840 063	10 341 232	5 003 363	3 219 980	1	1	1	1
Value added††	5 372 566	5 963 428	2 846 983	1 759 556	1	1	1	1
Selected costs	8 585 882	8 721 787	4 148 020	2 556 326	1	1	1	1
Materials, components, and supplies	4 423 782	4 442 219	2 159 180	1 478 239	1	1	1	1
Construction work subcontracted out to others	3 921 082	4 064 334	1 849 971	996 769	2	1	1	2
Selected power, fuels, and lubricants	241 019	215 234	138 868	81 318	1	1	2	1
Electricity	41 398	32 302	18 040	9 430	2	2	2	2
Natural gas	13 067	10 427	5 826	3 833	3	4	2	4
Gasoline and diesel fuel	171 624	159 013	105 824	57 984	1	1	2	1
On highway use	117 126	115 799	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	54 498	43 214	(NA)	(NA)	2	3	(NA)	(NA)
Other, including lubricating oils and greases	14 930	13 490	9 177	10 075	3	3	3	3
Rental cost for machinery, equipment, and buildings	189 150	179 082	77 150	47 550	2	2	2	2
For machinery and equipment	128 438	123 799	60 500	39 610	2	2	2	2
For buildings	60 712	55 282	16 649	7 940	3	2	3	3
Selected purchased services	226 929	204 004	111 332	92 593	2	1	1	3
Communication services	75 421	54 286	27 203	21 549	4	2	2	5
Repairs to buildings and other structures	10 769	11 702	5 127	3 550	8	4	3	4
Repairs to machinery and equipment	140 739	138 015	79 001	67 495	2	2	1	3
Ownership of construction projects:								
Value of construction work	13 761 145	14 405 566	6 853 334	4 216 749	1	1	1	1
Government owned	3 135 980	2 327 982	1 504 343	1 079 064	3	2	2	1
Federal	886 236	784 080	(NA)	(NA)	9	3	(NA)	(NA)
State and local	2 249 745	1 543 901	(NA)	(NA)	3	2	(NA)	(NA)
Privately owned	10 625 165	12 077 584	5 348 991	3 137 685	2	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 718 792	1 539 195	2	2
Capital expenditures, other than land -----	185 957	248 622	4	3
New -----	148 131	195 776	5	3
Used -----	37 826	52 846	8	7
Retirements and disposition of depreciable assets -----	106 359	74 587	6	9
End-of-year gross book value of depreciable assets -----	1 798 389	1 713 231	2	2
Depreciation charges during year -----	193 888	218 769	2	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	235 148	361 428	5	5
Capital expenditures, other than land -----	17 394	46 222	18	11
New buildings and other structures -----	13 774	35 471	22	14
Used buildings and other structures -----	3 620	10 750	19	16
Retirements and disposition of depreciable assets -----	6 519	18 126	18	23
End-of-year gross book value of depreciable assets -----	246 022	389 524	5	5
Depreciation charges during year -----	21 199	31 807	7	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 483 644	1 177 767	2	2
Capital expenditures, other than land -----	168 563	202 400	4	3
New machinery and equipment, including automobiles and trucks -----	134 357	160 304	4	3
New automobiles and trucks, intended primarily for highway use -----	47 809	73 086	5	3
Used machinery and equipment, including automobiles and trucks -----	34 206	42 095	9	7
Retirements and disposition of depreciable assets -----	99 840	56 460	6	7
End-of-year gross book value of depreciable assets -----	1 552 367	1 323 706	2	2
Depreciation charges during year -----	172 689	186 961	2	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	13 581	1
Value of construction work	13 761 145	1
Establishments with inventories:		
Number	3 551	2
Value of construction work	4 608 700	1
Inventories ¹ :		
End of 1992, materials and supplies	175 718	9
End of 1991, materials and supplies	154 360	8
Establishments with no inventories:		
Number	5 258	2
Value of construction work	5 695 584	2
Establishments not reporting:		
Number	4 772	2
Value of construction work	3 456 861	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	13 581	8 189	2 588	1 542	863	270	97	24	5	2	
All employees** -----	123 888	16 254	16 604	20 020	25 551	17 889	13 907	8 233	5 432	(D)	
Payroll, all employees -----	2 712 171	258 453	289 245	408 746	601 671	450 531	358 806	235 782	108 938	(D)	
Dollar value of business done -----	13 958 448	2 041 257	1 571 615	1 993 113	2 806 833	2 077 084	1 686 198	1 200 386	581 962	(D)	
Value of construction work -----	13 761 145	2 013 333	1 543 830	1 960 307	2 765 676	2 054 693	1 651 755	1 192 434	579 117	(D)	
Net value of construction work† -----	9 840 063	1 482 785	1 183 746	1 512 416	2 017 356	1 470 185	1 122 829	735 545	315 202	(D)	
Value added†† -----	5 372 566	736 112	652 305	836 161	1 096 791	793 215	650 603	460 597	146 782	(D)	
Cost of materials, components, supplies, and fuels -----	4 664 801	774 597	559 226	709 061	961 721	699 362	506 669	282 900	171 265	(D)	
Cost of construction work subcontracted out to others -----	3 921 082	530 548	360 084	447 891	748 320	584 508	528 926	456 889	263 915	(D)	
Rental cost for machinery, equipment, and buildings -----	189 150	17 087	23 202	22 189	35 910	24 925	39 536	15 226	11 076	(D)	
Capital expenditures, other than land -----	185 957	27 606	27 150	25 849	35 423	20 820	29 705	14 452	4 952	(D)	
End-of-year gross book value of depreciable assets -----	1 798 389	212 324	227 929	214 088	427 325	275 339	282 849	123 651	34 884	(D)	
1987											
All employees** -----	149 698	16 182	18 803	22 697	29 781	22 073	21 248	8 622	3 120	7 169	
Value of construction work -----	14 405 566	1 811 183	1 544 123	1 768 567	2 668 625	2 168 218	2 248 734	2 196 115	(D)	(D)	
Value added†† -----	5 963 428	678 480	656 234	776 809	1 215 484	897 086	902 035	444 818	392 480	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	3	4	4	2	2	(Z)	(Z)	(Z)	(D)	
Net value of construction work† -----	1	4	5	4	2	1	(Z)	(Z)	(Z)	(D)	
Capital expenditures, other than land -----	4	10	20	14	6	2	(Z)	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	13 581	(S)	(S)	1 825	3 756	2 025	1 666	1 585	515	286	202
All employees** -----	123 888	(S)	(S)	3 635	12 186	11 002	14 532	22 584	14 820	14 930	28 275
Payroll, all employees -----	2 712 171	(S)	(S)	36 589	162 134	184 783	279 881	480 498	364 810	410 380	776 827
Dollar value of business done -----	13 958 448	(S)	(S)	132 050	618 244	717 923	1 168 713	2 432 925	1 762 721	1 916 610	5 161 577
Value of construction work -----	13 761 145	(S)	(S)	130 272	613 092	708 335	1 148 071	2 397 724	1 732 331	1 889 329	5 094 635
Net value of construction work† -----	9 840 063	(S)	(S)	119 275	554 682	615 376	965 703	1 851 253	1 284 725	1 397 778	3 007 705
Value added†† -----	5 372 566	(S)	(S)	69 331	331 331	349 678	531 886	1 003 498	692 850	780 122	1 586 820
Cost of materials, components, supplies, and fuels -----	4 664 801	(S)	(S)	51 723	228 503	275 286	454 459	882 956	622 265	644 937	1 487 827
Cost of construction work subcontracted out to others -----	3 921 082	(S)	(S)	10 997	58 410	92 959	182 368	546 471	447 606	491 551	2 086 929
Rental cost for machinery, equipment, and buildings -----	189 150	(S)	(S)	2 044	(S)	11 606	14 830	29 716	21 302	25 653	72 299
Capital expenditures, other than land -----	185 957	(S)	(S)	3 951	13 722	13 537	24 294	31 326	17 859	21 748	58 841
End-of-year gross book value of depreciable assets -----	1 798 389	(S)	(S)	19 422	131 031	124 298	175 921	321 803	252 569	248 845	517 203
1987											
All employees** -----	149 698	(S)	(S)	(S)	(S)	13 352	16 068	24 846	21 948	17 014	36 601
Value of construction work -----	14 405 566	(S)	(S)	(S)	(S)	779 293	1 211 590	2 279 834	2 211 791	1 832 876	5 364 525
Value added†† -----	5 963 428	(S)	(S)	(S)	(S)	395 157	548 567	1 004 684	985 344	775 469	1 858 604
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	7	5	5	5	3	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	6	4	5	5	4	4	2	1
Capital expenditures, other than land -----	4	(S)	(S)	22	13	17	18	13	5	1	5

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

GA-10 GEORGIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	13 761 145	9 003 873	2 816 443	1 545 650	1	1	2	2
Building construction	10 523 470	7 290 050	2 230 442	1 002 978	1	2	2	2
Single-family houses	3 701 725	3 063 586	397 969	240 171	3	4	6	4
Single-family houses, detached	3 553 505	2 973 052	362 189	218 264	3	4	6	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	148 221	90 534	35 780	21 906	12	16	20	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	289 749	176 223	73 584	39 942	7	9	17	12
Other residential buildings, including hotels, motels, and tourist cabins	283 880	210 969	52 726	20 184	10	13	11	7
Office buildings	1 401 805	762 361	520 598	118 846	2	2	3	3
Other commercial buildings such as stores, restaurants, and automobile service stations	1 263 575	866 384	278 834	118 357	3	4	5	7
Industrial buildings and warehouses	1 616 279	911 033	358 572	346 674	1	2	3	2
Industrial buildings	1 303 595	737 802	284 874	280 918	2	2	4	3
Warehouses	312 684	173 230	73 698	65 755	3	5	3	4
Religious buildings	151 237	101 192	37 538	12 507	4	4	4	13
Educational buildings	587 603	418 822	139 884	28 897	4	4	9	4
Hospitals and institutional buildings	772 568	453 260	280 398	38 910	2	1	4	8
Amusement, social, and recreational buildings, indoors	223 355	180 984	30 002	12 369	3	3	8	24
Other nonresidential buildings	231 695	145 236	60 337	(S)	5	5	11	(S)
Nonbuilding construction	2 842 495	1 713 823	586 001	542 672	1	2	1	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	942 732	499 330	286 960	156 441	2	3	2	5
Airport runways and related work	83 064	(D)	(D)	(D)	1	(D)	(D)	(D)
Private driveways and parking areas	88 676	51 477	(D)	(D)	10	9	(D)	(D)
Bridges, tunnels, and elevated highways	174 630	122 471	36 966	15 193	5	7	2	8
Conservation and development construction	114 376	73 416	26 359	14 602	7	9	4	23
Power and communication transmission lines, towers, and related facilities	203 412	141 751	30 945	30 715	4	5	7	7
Sewers, water mains, and related facilities	349 334	263 597	55 811	29 927	5	5	6	18
Sewers, sewer lines, septic systems, and related facilities	198 907	149 698	32 075	17 133	6	6	7	24
Water mains and related facilities	150 428	113 899	23 736	12 793	6	8	11	18
Pipeline construction other than sewer or water lines	171 923	112 101	29 602	30 221	2	3	2	2
Blast furnaces, petroleum refineries, chemical complexes, etc.	150 015	(D)	(D)	80 856	3	(D)	(D)	2
Power plants	142 369	65 108	12 570	64 692	7	10	13	4
Sewage treatment and water treatment plants	109 932	70 902	35 969	3 061	2	2	5	5
Other nonbuilding construction	312 031	218 780	22 810	70 441	7	5	9	23
Construction work, n.s.k.	395 179	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)
1987								
Value of construction work	14 405 566	10 360 446	2 230 994	1 071 999	1	1	1	2
Building construction	10 637 865	8 139 339	1 749 321	749 205	1	1	2	2
Single-family houses	3 333 517	2 833 268	299 035	201 213	3	3	5	6
Single-family houses, detached	3 047 546	2 586 730	282 169	178 645	3	3	6	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	285 971	246 537	16 866	22 567	7	7	12	18
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	502 407	423 539	40 623	38 245	3	3	11	9
Other residential buildings, including hotels, motels, and tourist cabins	285 828	215 283	42 568	27 976	3	3	7	10
Office buildings	1 875 891	1 443 904	334 778	97 208	1	1	3	3
Other commercial buildings such as stores, restaurants, and automobile service stations	1 643 171	1 262 665	262 848	117 657	2	2	5	5
Industrial buildings and warehouses	1 594 844	1 055 289	355 935	183 619	1	2	2	3
Industrial buildings	1 196 979	738 516	303 496	154 966	1	2	2	2
Warehouses	397 864	316 772	52 439	28 652	4	4	5	16
Religious buildings	157 621	101 119	42 868	13 632	5	6	9	33
Educational buildings	418 438	263 400	139 189	15 849	3	2	6	4
Hospitals and institutional buildings	440 250	249 250	166 013	24 986	2	1	4	8
Amusement, social, and recreational buildings, indoors	105 636	69 114	32 457	4 063	3	4	3	17
Other nonresidential buildings	280 262	222 508	33 007	24 757	6	7	16	14
Nonbuilding construction	3 025 574	2 221 107	481 673	322 793	1	1	1	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	940 915	594 490	245 121	101 303	2	2	1	4
Private driveways and parking areas	113 775	79 762	20 505	13 507	9	9	10	10
Bridges, tunnels, and elevated highways	141 113	111 779	27 270	2 063	3	3	1	5
Power and communication transmission lines, towers, and related facilities	284 487	200 476	55 977	28 033	3	4	3	5
Sewers, water mains, and related facilities	323 408	282 112	23 785	17 510	4	4	6	8
Sewers, sewer lines, septic systems, and related facilities	184 898	164 896	11 858	8 143	4	4	5	12
Water mains and related facilities	138 510	117 215	11 926	9 367	5	6	9	8
Pipeline construction other than sewer or water lines	356 660	281 846	10 953	63 859	1	1	6	3
Blast furnaces, petroleum refineries, chemical complexes, etc.	52 939	30 184	11 441	11 313	3	3	1	8
Power plants	134 975	110 368	9 254	15 352	1	(Z)	12	2
Sewage treatment and water treatment plants	120 936	92 445	24 162	4 328	4	4	3	11
Other nonbuilding construction	556 366	437 646	53 205	65 525	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	742 127	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	13 581	95 113	90 860	97 188	98 126	94 278	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	2 014	5 372	5 135	5 402	5 849	5 101	4	4	5	5	5	5
1522	Other residential buildings -----	115	798	722	883	814	774	17	12	14	10	13	15
1531	Operative builders -----	739	1 556	1 432	1 595	1 623	1 576	7	8	8	8	7	8
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	214	2 646	2 477	2 443	2 992	2 673	13	6	4	5	9	7
1542	Nonresidential buildings, n.e.c. ----	831	10 350	10 524	10 191	10 406	10 278	6	2	2	3	2	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	264	7 116	5 627	9 687	6 767	6 380	10	2	2	2	3	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	27	802	758	842	831	777	31	13	12	14	13	12
1623	Water, sewer, and utility lines -----	352	4 935	4 593	4 629	5 140	5 377	8	3	4	4	3	3
1629	Heavy construction, n.e.c. -----	442	5 392	5 176	5 403	5 641	5 348	8	3	3	3	3	3
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	2 029	13 017	12 648	12 922	13 628	12 872	2	2	2	2	2	2
1721	Painting and paper hanging -----	628	3 516	3 223	3 641	3 889	3 310	5	5	5	5	6	5
1731	Electrical work -----	1 407	10 823	10 540	10 589	11 024	11 140	3	2	2	2	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	461	3 051	2 983	3 282	3 234	2 706	5	6	6	9	7	8
1742	Plastering, drywall, and insulation work -----	398	4 202	4 378	4 301	4 168	3 963	7	4	4	4	4	4
1743	Terrazzo, tile, marble, and mosaic work -----	164	825	778	838	903	780	10	12	12	12	12	13
175	Carpentry and floor work:												
1751	Carpentry -----	772	2 621	2 369	2 762	2 744	2 608	5	8	8	9	8	8
1752	Floor laying and other floor work --	204	753	684	794	795	741	9	16	13	16	18	18
1761	Roofing, siding, and sheet metal work -----	593	3 951	3 860	3 773	4 108	4 064	5	4	4	4	4	4
1771	Concrete work -----	528	4 301	3 831	4 406	4 540	4 425	6	5	5	5	6	5
1781	Water well drilling -----	89	297	296	293	312	285	9	13	12	13	12	14
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	116	1 276	1 442	1 259	1 170	1 233	12	8	7	8	9	9
1793	Glass and glazing work -----	134	763	730	738	768	815	12	10	9	10	10	11
1794	Excavation work -----	300	1 353	1 277	1 388	1 391	1 356	10	8	8	8	9	8
1795	Wrecking and demolition work -----	*18	90	*134	89	67	71	42	25	45	17	(Z)	(Z)
1796	Installing building equipment, n.e.c. -----	111	1 722	2 006	1 401	1 714	1 770	10	2	1	3	4	2
1799	Special trade contractors, n.e.c. ----	631	3 584	3 234	3 636	3 608	3 855	7	5	5	6	5	4

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	9.1	21.9	144.7	.197	.339	.285	.238	.014
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.8	16.8	214.4	.112	.352	.330	.020	.006
1522	Other residential buildings -----	12.1	21.6	293.9	.128	.254	.456	.027	.008
1531	Operative builders -----	4.8	27.8	955.2	.067	.414	.344	*.005	.002
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	16.2	26.5	198.5	.174	.261	.448	.123	.013
1542	Nonresidential buildings, n.e.c. -----	17.8	25.1	297.8	.120	.229	.576	.017	.014
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	32.0	20.1	138.4	.172	.371	.248	.155	.017
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	37.1	22.0	137.7	.200	.286	.230	.275	.008
1623	Water, sewer, and utility lines -----	17.3	22.5	110.7	.250	.374	.116	.160	.026
1629	Heavy construction, n.e.c. -----	15.4	25.5	120.1	.268	.327	.188	.211	.031
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.5	22.7	110.3	.273	.412	.122	.489	.013
1721	Painting and paper hanging -----	6.6	19.1	67.7	.333	.240	.147	.563	.020
1731	Electrical work -----	9.9	24.3	90.8	.343	.404	.040	.567	.016
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	7.2	15.5	49.0	.344	.332	.117	.752	.017
1742	Plastering, drywall, and insulation work -----	12.6	19.6	83.9	.278	.417	.077	.799	.009
1743	Terrazzo, tile, marble, and mosaic work -----	6.2	19.7	89.9	.271	(D)	(S)	.590	.008
175	Carpentry and floor work:								
1751	Carpentry -----	4.1	14.8	65.4	.270	.379	.115	.531	.013
1752	Floor laying and other floor work -----	5.0	18.7	129.8	.195	.435	.109	.419	(S)
1761	Roofing, siding, and sheet metal work -----	8.4	19.9	83.7	.300	.424	.071	.466	.016
1771	Concrete work -----	9.7	18.8	81.3	.275	.358	.101	.661	.020
1781	Water well drilling -----	4.5	17.5	101.9	.232	.427	.013	.057	.011
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	13.6	20.9	85.9	.301	.342	.167	.594	.032
1793	Glass and glazing work -----	8.2	22.5	116.8	.277	.531	.020	.626	.012
1794	Excavation work -----	5.4	21.5	95.7	.267	.279	.119	.499	.030
1795	Wrecking and demolition work -----	6.4	13.7	55.0	.321	(D)	.167	.309	.050
1796	Installing building equipment, n.e.c. -----	20.5	22.7	91.6	.327	.345	.044	.290	.014
1799	Special trade contractors, n.e.c. -----	7.5	21.0	80.4	.345	.315	.085	.459	.021

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	ATLANTA, GA MSA											
15,16, 17	Construction industries	7 077	73 991	1 752 988	9 317 025	6 440 197	3 501 736	3 059 787	2 876 829	110 864	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	4 197	77 981	715 264	471 967	237 517	240 455	243 297	(S)	6	8
1522	Other residential buildings	46	303	8 238	104 727	55 548	36 123	19 571	*49 179	(S)	16	19
1531	Operative builders	474	2 688	80 866	1 208 453	801 686	325 636	499 745	406 768	9 417	6	7
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	113	2 090	57 553	336 524	182 666	101 718	88 686	153 858	2 435	8	5
1542	Nonresidential buildings, n.e.c.	476	9 541	265 462	2 379 784	928 438	441 581	513 398	1 451 346	7 301	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	129	4 267	78 388	461 179	351 962	194 074	168 372	109 217	15 783	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	10	471	11 128	43 477	34 018	19 571	14 455	9 459	(D)	18	8
1623	Water, sewer, and utility lines	179	4 113	99 207	407 733	360 685	216 149	150 346	47 048	13 203	4	4
1629	Heavy construction, n.e.c.	213	3 550	96 668	386 147	312 277	185 415	128 277	73 870	8 144	4	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	993	9 785	238 203	898 115	765 642	409 662	359 449	132 473	8 529	2	2
1721	Painting and paper hanging	337	2 516	54 632	150 559	128 164	96 341	32 067	22 394	977	5	4
1731	Electrical work	745	8 450	219 402	642 239	612 541	362 403	256 233	29 698	5 964	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	1 756	32 686	101 229	85 865	51 508	34 388	15 363	(S)	8	12
1742	Plastering, drywall, and insulation work	235	3 026	65 275	233 928	213 144	123 760	93 648	20 784	1 956	5	6
1743	Terrazzo, tile, marble, and mosaic work	90	630	14 908	56 881	51 259	25 913	27 408	(S)	(D)	13	22
175	Carpentry and floor work:											
1751	Carpentry	398	1 806	27 288	89 883	80 798	46 605	35 154	9 085	1 398	11	9
1752	Floor laying and other floor work	109	477	12 021	65 600	57 927	32 446	28 030	7 673	(S)	11	11
1761	Roofing, siding, and sheet metal work	289	2 634	57 865	199 055	186 687	100 651	86 378	12 369	2 463	5	5
1771	Concrete work	292	3 731	71 826	261 272	232 631	140 346	93 528	28 641	12 062	5	6
1781	Water well drilling	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	815	18 798	53 117	46 682	34 795	19 142	6 435	683	8	4
1793	Glass and glazing work	81	653	16 786	61 785	60 190	29 554	31 128	1 595	421	9	6
1794	Excavation work	178	1 189	27 102	101 577	87 119	60 120	29 012	14 457	4 741	10	10
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	64	1 776	41 740	132 244	125 960	84 824	44 006	6 284	934	3	1
1799	Special trade contractors, n.e.c.	397	3 396	76 829	219 382	200 298	139 823	65 629	19 084	6 386	6	5

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Maryland. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 36,296 establishments in this State operating in the construction industries. These establishments accounted for \$15.8 billion in total dollar value of business done.

Most of the 36,296 construction establishments were small. Of the total, 22,514 were nonemployers, and over half of the employer establishments had less than 5 employees. The 5,819 construction establishments with 5 employees or more, while representing only 16 percent of all establishments, accounted for more than 86 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$15.1 billion in total dollar value of business done. Of this amount, \$14.7 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$4.1 billion, leaving net value of construction work of \$10.5 billion. In addition, these establishments paid out \$4.9 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$6.5 billion. (See Introduction and appendixes for explanation of terms.)

There were 13,782 establishments with total employment averaging 134,167 during the year. Total payroll for 1992 was \$3.4 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 22,514 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$738 million. Most of these establishments, about 81 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

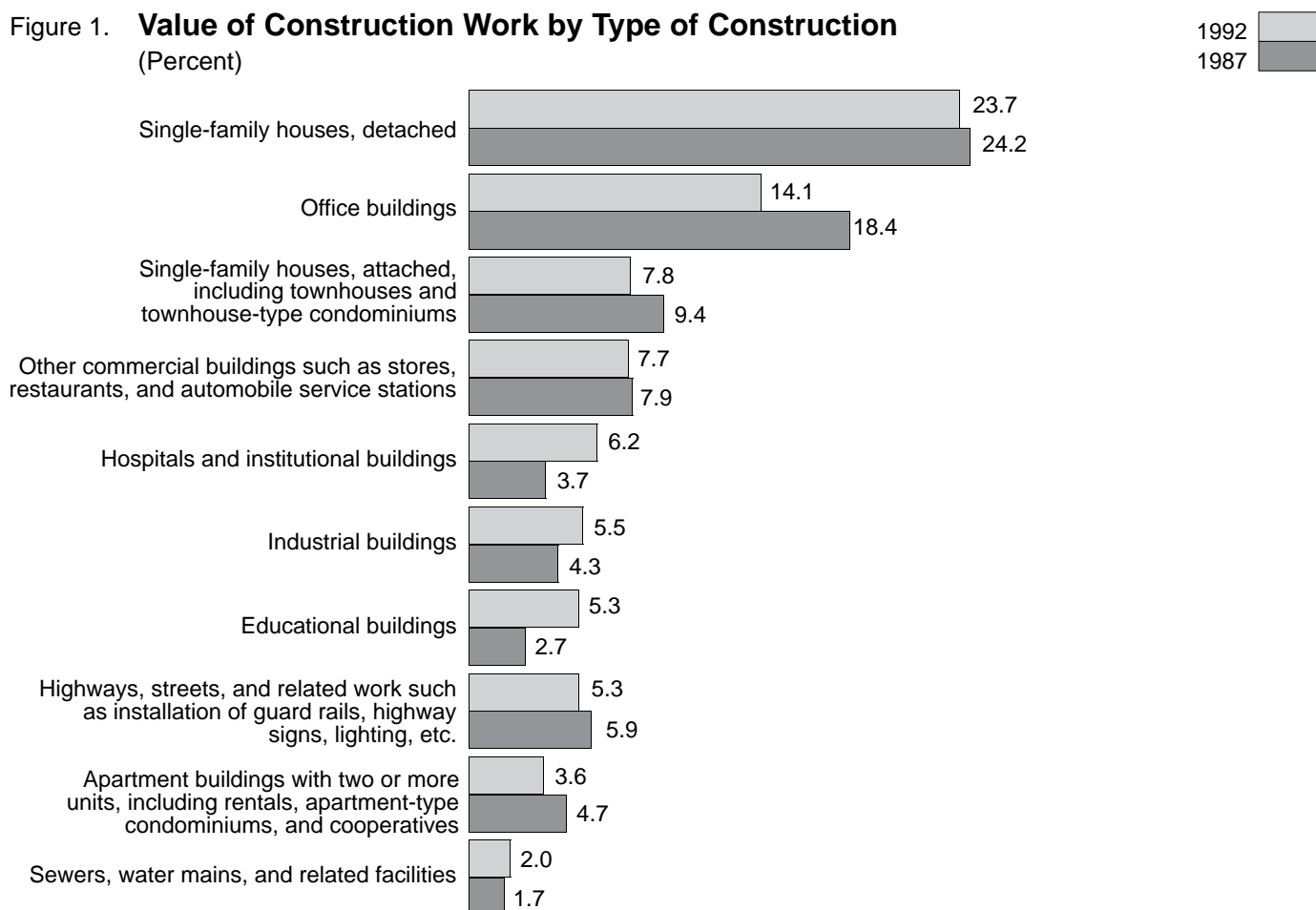


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

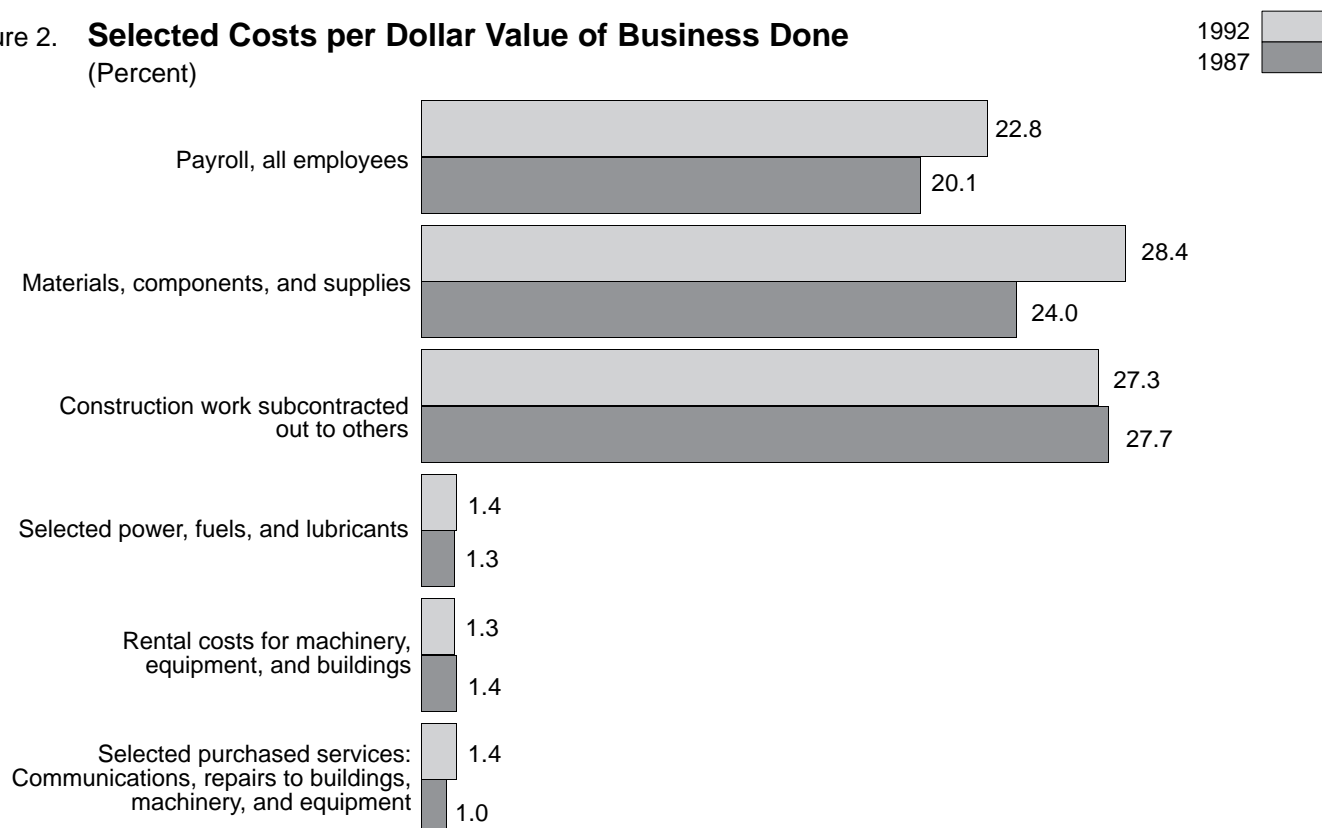


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done	Number	Proprie- tors and working partners	Dollar value of business done ¹	Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	36 296	25 149	134 167	15 842 182	22 514	21 208	738 058	13 782	3 941	134 167	15 104 124	1	1
15	Building construction—General contractors and operative builders ----	8 425	4 606	32 651	7 204 374	4 002	3 293	287 819	4 423	1 313	32 651	6 916 555	2	1
16	Heavy construction other than building construction—contractors -----	826	268	19 289	2 084 678	248	213	8 606	578	(S)	19 289	2 076 072	1	1
17	Special trade contractors -----	27 045	20 275	82 227	6 553 130	18 264	17 702	441 633	8 781	2 573	82 227	6 111 497	1	1
1711	Plumbing, heating, and air-conditioning --	3 386	1 951	18 398	1 842 795	1 634	1 550	54 052	1 752	401	18 398	1 788 743	2	1
1731	Electrical work -----	2 817	1 654	13 459	1 084 945	1 536	1 439	29 476	1 281	215	13 459	1 055 469	2	2
	1987													
15, 16, 17	Construction industries ² -----	34 694	24 028	160 612	19 578 087	22 191	21 561	2 076 023	12 503	2 467	160 612	17 502 064	1	1
15	Building construction—General contractors and operative builders ----	8 534	4 740	43 853	9 484 794	4 532	3 997	580 291	4 002	743	43 853	8 904 503	1	1
16	Heavy construction other than building construction—contractors -----	791	233	20 800	2 013 009	198	191	19 879	593	42	20 800	1 993 130	1	1
17	Special trade contractors -----	24 357	18 115	94 852	7 020 448	16 654	16 459	631 980	7 703	1 656	94 852	6 388 468	1	1
1711	Plumbing, heating, and air-conditioning --	2 969	1 603	21 202	1 826 060	1 389	1 368	65 586	1 580	235	21 202	1 760 474	1	1
1731	Electrical work -----	2 207	1 339	14 646	1 003 497	1 244	1 195	46 560	963	144	14 646	956 937	2	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	13 782	134 167	102 371	3 436 910	2 318 702	14 650 489	10 522 861	6 472 251
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	2 941	12 882	9 523	243 389	157 564	1 388 660	1 024 808	573 117
1522	Other residential buildings -----	185	1 117	754	27 252	13 594	187 961	81 586	60 852
1531	Operative builders -----	460	4 745	1 993	151 086	45 821	1 788 957	1 031 884	627 356
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	59	1 004	782	24 743	16 602	118 880	65 462	28 665
1542	Nonresidential buildings, n.e.c. -----	778	12 903	8 730	402 879	233 727	3 082 781	1 268 569	832 885
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	180	6 920	5 455	192 089	126 721	789 534	605 359	390 528
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	22	945	807	21 437	16 479	76 689	62 489	38 107
1623	Water, sewer, and utility lines -----	155	4 669	3 904	122 000	90 665	369 847	331 023	213 993
1629	Heavy construction, n.e.c. -----	221	6 755	5 542	274 934	210 011	805 266	586 254	360 471
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	1 752	18 398	13 654	511 809	344 231	1 771 689	1 487 191	866 750
1721	Painting and paper hanging -----	762	4 906	4 244	90 690	68 677	221 997	205 673	148 236
1731	Electrical work -----	1 281	13 459	10 389	361 050	255 213	1 044 831	1 018 324	603 062
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	643	6 009	5 171	108 898	83 662	271 407	261 622	161 492
1742	Plastering, drywall, and insulation work -----	469	6 844	5 771	174 245	131 795	449 112	399 132	263 559
1743	Terrazzo, tile, marble, and mosaic work -----	119	684	535	18 381	13 031	44 952	44 164	26 788
175	Carpentry and floor work:								
1751	Carpentry -----	1 066	5 323	4 332	97 670	76 040	304 201	262 439	165 546
1752	Floor laying and other floor work -----	265	1 482	1 039	33 564	22 267	142 947	130 338	60 533
1761	Roofing, siding, and sheet metal work -----	617	5 465	4 265	125 523	84 450	354 421	334 671	202 591
1771	Concrete work -----	610	6 944	5 695	132 581	97 551	484 056	438 921	239 836
1781	Water well drilling -----	51	469	375	12 902	10 149	38 547	37 902	25 513
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	59	1 091	909	33 722	25 992	96 505	91 273	57 376
1793	Glass and glazing work -----	106	877	547	23 080	13 380	72 213	69 873	35 398
1794	Excavation work -----	358	2 600	2 108	62 682	45 833	197 545	176 421	137 127
1795	Wrecking and demolition work -----	31	615	493	13 231	9 770	44 273	40 139	32 615
1796	Installing building equipment, n.e.c. -----	93	2 123	1 684	70 626	55 278	213 214	203 465	146 385
1799	Special trade contractors, n.e.c. -----	502	4 940	3 671	106 447	70 199	290 001	263 879	173 471

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
4 504 245	4 127 628	4 271 256	199 418	152 894	1 946 712	160 612	16 523 797	7 694 849	1	1	4	15, 16, 17
												15
468 067	363 853	45 921	7 822	19 697	107 832	12 947	1 249 590	481 626	5	5	20	152
23 169	106 374	3 683	1 279	1 058	10 251	2 373	380 352	118 978	11	6	22	1521
616 433	757 073	6 288	10 816	4 915	98 255	9 480	2 927 423	1 193 160	3	4	15	1531
37 613	53 418	*1 750	1 503	*1 228	11 203	2 327	246 329	110 129	12	9	48	154
553 469	1 814 212	72 125	19 542	12 411	169 692	16 726	3 345 732	906 432	2	2	9	1541
												1542
												16
237 599	184 175	173 233	31 783	22 657	375 810	7 755	914 366	471 093	2	2	2	1611
24 803	14 200	2 323	1 806	1 635	30 542	850	98 568	45 631	2	3	1	162
120 499	38 824	117 889	10 165	8 632	153 771	4 568	320 870	187 042	3	2	12	1622
233 861	219 012	91 878	10 306	9 871	86 294	7 627	616 650	424 115	2	2	21	1623
												1629
												17
637 495	284 498	1 012 463	24 858	18 729	181 442	21 202	1 746 564	882 217	2	1	6	1711
59 361	16 325	111 191	3 035	2 282	21 471	4 983	249 416	165 316	6	4	31	1721
425 900	26 507	665 866	13 531	12 878	107 632	14 646	942 257	577 073	2	2	15	1731
(D)	9 784	224 851	3 997	5 112	53 155	8 825	409 134	269 277	4	3	19	174
137 750	49 981	409 776	4 796	4 320	40 736	8 135	534 534	319 049	4	2	16	1741
17 674	788	32 644	1 052	175	2 270	768	56 068	34 026	11	8	30	1742
												1743
100 650	41 762	143 019	3 206	3 169	28 283	6 050	303 481	173 118	5	5	19	175
70 348	12 609	103 995	2 818	802	14 572	1 893	169 199	85 219	7	9	27	1751
												1752
135 645	19 750	185 366	5 184	3 457	54 715	6 473	381 629	230 766	3	3	15	1761
199 415	45 135	382 232	15 723	7 939	129 379	8 417	533 499	293 854	3	3	12	1771
12 418	645	11 098	950	1 101	19 742	469	36 406	23 545	4	6	11	1781
34 836	5 231	76 945	1 763	(S)	27 768	1 788	112 878	85 322	7	6	(S)	179
35 105	2 340	47 154	1 854	234	7 852	944	77 111	38 035	6	5	29	1791
51 730	21 124	129 804	10 809	3 627	165 480	3 097	264 825	199 868	7	7	21	1793
(D)	4 135	21 425	2 360	802	12 031	766	37 403	33 514	4	4	(Z)	1794
60 458	9 750	89 586	2 236	865	9 282	1 675	140 957	97 035	3	4	35	1795
98 652	26 122	108 750	6 225	3 369	27 249	4 721	297 390	187 842	5	5	22	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	13 782	12 503	9 158	9 693	(Z)	1	2	2
Proprietors and working partners	3 941	2 467	2 645	4 658	3	5	4	5
All employees**	134 167	160 612	103 805	105 018	1	1	1	1
Construction workers:								
March	95 903	115 455	74 980	76 700	1	1	1	1
May	103 688	126 889	82 050	88 887	1	1	1	1
August	108 680	133 154	84 662	94 911	1	1	1	1
November	101 216	127 278	83 994	87 028	1	1	1	1
Average	102 371	125 694	82 261	86 973	1	1	1	1
Other employees:								
March	31 825	34 733	21 503	17 529	1	1	1	1
May	31 770	34 848	(NA)	(NA)	1	1	(NA)	(NA)
August	31 770	35 131	(NA)	(NA)	1	1	(NA)	(NA)
November	31 818	34 960	(NA)	(NA)	1	1	(NA)	(NA)
Average	31 796	34 918	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	3 436 910	3 513 804	1 870 863	1 310 695	(Z)	(Z)	1	1
Payroll, construction workers	2 318 702	2 389 182	1 355 029	977 827	(Z)	(Z)	1	1
Payroll, other employees	1 118 209	1 124 621	515 833	332 868	1	1	1	1
First-quarter payroll, all employees	784 902	782 110	427 542	274 576	1	1	1	1
Fringe benefits, all employees	710 900	718 717	339 992	217 364	1	1	1	1
Legally required expenditures	464 829	488 297	241 834	137 179	1	1	1	1
Voluntary expenditures	246 071	230 419	98 157	80 186	1	1	1	1
Dollar value of business done	15 104 124	17 502 064	7 982 720	5 548 818	1	1	1	1
Value of construction work	14 650 489	16 523 797	7 536 040	5 268 141	1	1	1	1
Value of construction work subcontracted in from others	4 271 256	4 179 728	1 902 335	1 237 468	1	2	2	(Z)
Other business receipts	453 635	445 246	325 102	280 677	1	1	1	2
Net value of construction†	10 522 861	11 679 832	5 436 573	3 851 968	1	1	1	1
Value added††	6 472 251	7 694 849	3 538 825	2 324 577	1	1	1	1
Selected costs	8 631 873	9 274 193	4 322 317	3 111 485	1	1	1	1
Materials, components, and supplies	4 293 829	4 201 258	2 087 368	1 608 163	1	1	1	1
Construction work subcontracted out to others	4 127 628	4 843 964	2 099 467	1 416 173	1	1	1	1
Selected power, fuels, and lubricants	210 415	228 970	135 481	87 150	1	1	1	1
Electricity	35 201	35 709	18 215	10 932	3	1	2	1
Natural gas	9 840	7 063	4 122	3 606	3	1	2	4
Gasoline and diesel fuel	153 110	171 362	103 857	61 257	1	1	1	1
On highway use	119 392	130 224	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use	33 718	41 137	(NA)	(NA)	3	1	(NA)	(NA)
Other, including lubricating oils and greases	12 264	14 835	9 286	11 357	3	2	2	3
Rental cost for machinery, equipment, and buildings	199 418	239 862	119 066	77 287	2	1	1	1
For machinery and equipment	114 220	162 471	88 835	63 453	3	2	1	1
For buildings	85 198	77 391	30 231	13 833	2	1	1	1
Selected purchased services	209 934	181 874	105 647	179 370	2	1	1	3
Communication services	68 203	53 964	28 669	28 226	2	1	2	18
Repairs to buildings and other structures	13 028	11 571	5 788	4 078	7	4	3	3
Repairs to machinery and equipment	128 704	116 338	71 189	147 066	2	1	1	(Z)
Ownership of construction projects:								
Value of construction work	14 650 489	16 523 797	7 536 040	5 268 141	1	1	1	1
Government owned	3 779 266	2 794 512	1 950 121	1 458 584	2	2	1	(Z)
Federal	1 494 630	961 471	(NA)	(NA)	3	4	(NA)	(NA)
State and local	2 284 636	1 833 040	(NA)	(NA)	3	2	(NA)	(NA)
Privately owned	10 871 223	13 729 284	5 585 918	3 809 557	1	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 889 109	1 675 951	2	1
Capital expenditures, other than land -----	152 894	282 045	4	2
New -----	118 494	239 167	4	2
Used -----	34 400	42 877	9	6
Retirements and disposition of depreciable assets -----	95 291	73 083	4	5
End-of-year gross book value of depreciable assets -----	1 946 712	1 884 913	2	1
Depreciation charges during year-----	215 049	246 678	2	1
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	232 302	262 486	11	4
Capital expenditures, other than land -----	16 433	28 700	16	8
New buildings and other structures -----	12 759	18 985	18	8
Used buildings and other structures -----	(S)	9 714	(S)	15
Retirements and disposition of depreciable assets -----	9 342	10 308	23	29
End-of-year gross book value of depreciable assets -----	239 393	280 877	11	4
Depreciation charges during year-----	21 268	21 856	7	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 656 807	1 413 465	2	1
Capital expenditures, other than land -----	136 461	253 345	3	2
New machinery and equipment, including automobiles and trucks -----	105 735	220 181	3	2
New automobiles and trucks, intended primarily for highway use -----	48 990	105 785	5	3
Used machinery and equipment, including automobiles and trucks -----	30 726	33 163	8	6
Retirements and disposition of depreciable assets -----	85 949	62 775	4	3
End-of-year gross book value of depreciable assets -----	1 707 319	1 604 035	2	1
Depreciation charges during year-----	193 781	224 821	2	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	13 782	(Z)
Value of construction work	14 650 489	1
Establishments with inventories:		
Number	3 020	2
Value of construction work	5 126 017	1
Inventories ¹ :		
End of 1992, materials and supplies	131 919	9
End of 1991, materials and supplies	121 763	9
Establishments with no inventories:		
Number	6 258	2
Value of construction work	6 903 928	1
Establishments not reporting:		
Number	4 504	2
Value of construction work	2 620 544	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	13 782	7 962	2 916	1 527	957	266	131	14	6	2	
All employees** -----	134 167	15 775	18 488	20 430	28 970	18 136	19 127	4 375	8 865	(D)	
Payroll, all employees -----	3 436 910	276 118	388 487	489 629	763 997	517 578	539 398	126 959	334 745	(D)	
Dollar value of business done -----	15 104 124	1 500 520	1 714 339	1 955 279	3 155 765	2 246 474	2 387 352	551 569	1 592 826	(D)	
Value of construction work -----	14 650 489	1 484 949	1 696 622	1 931 447	3 072 883	2 121 512	2 311 290	520 091	1 511 695	(D)	
Net value of construction work† -----	10 522 861	1 190 419	1 305 680	1 511 203	2 315 413	1 511 527	1 558 983	311 263	818 373	(D)	
Value added†† -----	6 472 251	699 050	792 709	902 137	1 438 366	998 140	994 692	142 977	504 181	(D)	
Cost of materials, components, supplies, and fuels -----	4 504 245	506 941	530 688	632 898	959 929	638 349	640 353	199 764	395 323	(D)	
Cost of construction work subcontracted out to others -----	4 127 628	294 529	390 942	420 244	757 470	609 985	752 307	208 828	693 322	(D)	
Rental cost for machinery, equipment, and buildings -----	199 418	17 781	25 184	23 868	40 520	29 626	35 890	9 442	17 106	(D)	
Capital expenditures, other than land -----	152 894	17 710	25 275	23 294	32 315	16 183	25 248	8 806	4 063	(D)	
End-of-year gross book value of depreciable assets -----	1 946 712	184 760	234 564	314 568	381 826	265 715	391 618	107 209	66 450	(D)	
1987											
All employees** -----	160 612	(S)	18 421	22 185	34 425	24 480	22 830	10 228	5 829	9 379	
Value of construction work -----	16 523 797	(S)	1 471 859	1 911 656	3 119 271	2 259 936	2 828 074	1 292 465	2 361 351	(D)	
Value added†† -----	7 694 849	(S)	688 782	949 376	1 474 359	1 034 875	1 361 395	498 344	359 360	781 783	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	3	4	4	2	1	1	(Z)	(Z)	(D)	
Net value of construction work† -----	1	5	5	3	1	(Z)	(Z)	(Z)	(Z)	(D)	
Capital expenditures, other than land -----	4	11	17	11	3	1	(Z)	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics		Establishments with dollar value of business done—									
		Total	Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	$10,000,000 or more
1992											
Number of establishments -----	13 782	(S)	(S)	1 993	3 538	2 590	1 588	1 347	525	269	229
All employees** -----	134 167	(S)	(S)	3 852	10 781	15 324	15 343	22 669	18 281	14 764	31 403
Payroll, all employees -----	3 436 910	(S)	(S)	44 715	170 252	285 412	331 858	569 088	480 101	440 277	1 099 873
Dollar value of business done -----	15 104 124	(S)	(S)	148 790	578 667	913 514	1 113 609	2 067 941	1 809 041	1 847 449	6 580 140
Value of construction work -----	14 650 489	(S)	(S)	147 677	574 649	907 337	1 104 362	2 039 361	1 770 888	1 807 188	6 254 373
Net value of construction work† -----	10 522 861	(S)	(S)	137 343	525 225	815 109	940 715	1 661 479	1 425 371	1 348 061	3 628 319
Value added†† -----	6 472 251	(S)	(S)	90 009	321 566	489 727	574 906	976 998	916 739	830 663	2 245 964
Cost of materials, components, supplies, and fuels -----	4 504 245	(S)	(S)	48 448	207 677	331 559	375 056	713 061	546 785	557 659	1 708 122
Cost of construction work subcontracted out to others -----	4 127 628	(S)	(S)	10 334	49 424	92 228	163 647	377 881	345 517	459 127	2 626 054
Rental cost for machinery, equipment, and buildings -----	199 418	(S)	(S)	(S)	8 513	17 228	14 836	29 779	24 338	30 017	72 271
Capital expenditures, other than land -----	152 894	(S)	(S)	(S)	8 830	18 573	15 614	23 891	23 455	16 519	43 066
End-of-year gross book value of depreciable assets -----	1 946 712	(S)	(S)	(S)	80 814	154 536	184 967	357 557	243 074	274 914	609 312
1987											
All employees** -----	160 612	(S)	(S)	(S)	(S)	13 153	17 853	27 775	22 789	18 848	44 057
Value of construction work -----	16 523 797	(S)	(S)	(S)	(S)	682 114	1 188 691	2 252 164	2 047 679	2 075 022	7 654 937
Value added†† -----	7 694 849	(S)	(S)	(S)	(S)	369 532	626 976	1 138 661	1 066 296	937 852	3 193 556
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	7	5	5	4	3	1	1	(Z)
Net value of construction work† -----	1	(S)	(S)	5	4	5	4	3	4	2	1
Capital expenditures, other than land -----	4	(S)	(S)	(S)	15	15	15	7	15	2	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	14 650 489	8 898 462	3 438 981	1 970 138	1	1	1	1
Building construction	11 719 935	7 449 227	2 973 984	1 296 724	1	1	1	2
Single-family houses	4 611 437	3 507 194	744 738	359 504	2	3	4	4
Single-family houses, detached	3 474 987	2 588 477	618 391	268 120	2	3	4	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	1 136 450	918 718	126 347	91 385	4	4	10	9
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	533 318	289 401	132 419	111 498	3	3	6	7
Other residential buildings, including hotels, motels, and tourist cabins	132 219	52 487	49 030	30 702	5	3	9	13
Office buildings	2 069 648	1 058 342	780 319	230 987	1	1	2	3
Other commercial buildings such as stores, restaurants, and automobile service stations	1 134 807	621 696	332 222	180 889	2	2	4	3
Industrial buildings and warehouses	1 036 984	582 986	270 511	183 487	2	2	3	5
Industrial buildings	810 612	439 660	220 999	149 954	2	2	3	5
Warehouses	226 371	143 326	49 512	33 533	3	4	4	9
Religious buildings	195 639	95 257	77 087	23 296	4	7	5	10
Educational buildings	773 168	452 729	251 819	68 619	5	9	3	10
Hospitals and institutional buildings	909 815	558 331	268 597	82 887	1	1	3	3
Amusement, social, and recreational buildings, indoors	131 540	102 915	20 092	8 534	3	2	17	10
Other nonresidential buildings	191 360	127 889	47 150	16 321	3	2	9	12
Nonbuilding construction	2 587 645	1 449 234	464 997	673 414	1	1	2	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	772 468	463 163	201 314	107 991	2	3	1	3
Private driveways and parking areas	88 864	50 325	8 648	29 891	8	11	12	10
Bridges, tunnels, and elevated highways	115 072	67 543	28 732	18 796	2	4	(Z)	1
Power and communication transmission lines, towers, and related facilities	155 073	96 996	15 135	(S)	6	8	6	(S)
Sewers, water mains, and related facilities	295 907	192 103	73 164	30 641	2	3	2	10
Sewers, sewer lines, septic systems, and related facilities	170 341	113 304	39 653	17 383	3	3	2	15
Water mains and related facilities	125 567	78 798	33 511	13 258	3	4	4	8
Sewage treatment and water treatment plants	157 834	126 948	22 516	8 371	2	1	3	28
Other nonbuilding construction	1 002 426	452 156	115 487	434 783	2	2	7	1
Construction work, n.s.k.	342 909	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1987								
Value of construction work	16 523 797	11 642 176	2 862 082	1 533 697	1	1	1	1
Building construction	13 516 215	10 202 481	2 275 568	1 038 167	1	1	2	2
Single-family houses	5 559 314	4 766 797	506 862	285 654	2	2	4	5
Single-family houses, detached	4 002 279	3 342 617	435 338	224 323	2	2	4	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	1 557 034	1 424 180	71 523	61 330	4	3	19	10
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	783 517	515 610	167 947	99 959	2	2	6	7
Other residential buildings, including hotels, motels, and tourist cabins	445 356	340 546	63 477	41 332	1	1	4	7
Office buildings	3 037 950	2 336 059	532 418	169 473	1	1	4	3
Other commercial buildings such as stores, restaurants, and automobile service stations	1 302 926	812 294	362 707	127 924	3	4	2	5
Industrial buildings and warehouses	1 046 486	634 291	223 215	188 978	1	2	2	3
Industrial buildings	705 250	387 903	160 820	156 526	1	2	2	3
Warehouses	341 235	246 387	62 395	32 451	3	3	4	10
Religious buildings	84 217	40 445	27 853	15 918	4	4	7	7
Educational buildings	448 182	254 615	152 336	41 230	1	1	3	7
Hospitals and institutional buildings	608 897	405 856	166 518	36 522	3	4	4	3
Other nonresidential buildings	199 370	95 968	72 235	31 177	6	6	5	25
Nonbuilding construction	2 521 739	1 439 695	586 514	495 530	1	1	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	971 260	493 715	355 362	122 182	2	2	2	3
Bridges, tunnels, and elevated highways	134 703	69 783	46 389	18 530	1	(Z)	1	5
Power and communication transmission lines, towers, and related facilities	83 000	54 151	13 798	15 051	7	7	4	14
Sewers, water mains, and related facilities	277 097	222 025	27 156	27 915	3	2	6	7
Sewers, sewer lines, septic systems, and related facilities	167 855	131 516	24 301	12 038	3	3	7	13
Water mains and related facilities	109 242	90 509	2 855	15 877	3	2	9	5
Sewage treatment and water treatment plants	117 932	71 160	43 583	3 188	3	4	2	7
Other nonbuilding construction	937 747	528 861	100 226	308 664	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	485 843	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. **Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	13 782	102 371	95 903	103 688	108 680	101 216	(Z)	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	2 941	9 523	8 979	9 628	10 506	8 981	3	6	6	6	7	5
1522	Other residential buildings -----	185	754	554	702	790	971	15	13	11	11	12	22
1531	Operative builders -----	460	1 993	1 946	2 087	2 102	1 836	8	5	5	5	5	5
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	59	782	612	1 185	672	659	25	11	10	7	13	16
1542	Nonresidential buildings, n.e.c. ----	778	8 730	8 541	8 607	9 225	8 546	6	3	2	2	3	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	180	5 455	4 192	5 312	5 758	6 557	9	2	2	2	2	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	22	807	711	805	879	832	34	3	2	3	3	2
1623	Water, sewer, and utility lines -----	155	3 904	3 784	3 822	4 033	3 975	8	3	3	3	3	3
1629	Heavy construction, n.e.c. -----	221	5 542	6 407	4 916	5 730	5 113	11	2	1	2	2	2
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 752	13 654	13 292	13 681	14 247	13 395	2	2	2	2	2	2
1721	Painting and paper hanging -----	762	4 244	3 162	4 948	5 060	3 807	4	6	4	10	9	4
1731	Electrical work -----	1 281	10 389	10 110	10 252	10 800	10 392	2	2	2	2	2	3
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	643	5 171	4 709	5 353	5 320	5 301	3	4	4	3	4	5
1742	Plastering, drywall, and insulation work -----	469	5 771	5 708	5 893	5 900	5 585	4	4	3	4	5	5
1743	Terrazzo, tile, marble, and mosaic work -----	119	535	616	574	504	444	12	11	10	11	12	13
175	Carpentry and floor work:												
1751	Carpentry -----	1 066	4 332	3 836	4 415	4 624	4 452	5	6	5	6	6	6
1752	Floor laying and other floor work --	265	1 039	1 068	1 063	1 100	926	8	8	7	7	7	9
1761	Roofing, siding, and sheet metal work -----	617	4 265	3 942	4 401	4 607	4 112	6	3	4	3	3	3
1771	Concrete work -----	610	5 695	4 706	6 016	6 415	5 645	6	3	3	3	3	4
1781	Water well drilling -----	51	375	357	391	403	348	7	4	5	4	4	5
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	59	909	888	907	946	895	12	6	6	7	8	6
1793	Glass and glazing work -----	106	547	530	531	552	574	11	6	8	6	6	5
1794	Excavation work -----	358	2 108	1 714	2 136	2 298	2 285	9	7	7	6	7	8
1795	Wrecking and demolition work -----	31	493	456	502	512	503	25	4	4	4	5	4
1796	Installing building equipment, n.e.c. -----	93	1 684	1 709	1 660	1 689	1 679	13	3	3	3	2	2
1799	Special trade contractors, n.e.c. ----	502	3 671	3 375	3 900	4 006	3 404	8	6	6	6	5	6

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	9.7	25.6	143.1	.235	.307	.282	.292	.014
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.4	18.9	145.8	.175	.337	.262	.033	.006
1522	Other residential buildings -----	6.0	24.4	249.3	.145	.123	.566	.020	.007
1531	Operative builders -----	10.3	31.8	897.6	.084	.345	.423	.004	.006
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	17.1	24.6	152.0	.208	.316	.449	.015	.013
1542	Nonresidential buildings, n.e.c. -----	16.6	31.2	353.1	.131	.180	.588	.023	.006
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	38.5	27.8	144.7	.243	.301	.233	.219	.040
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	43.0	22.7	95.0	.280	.323	.185	.030	.024
1623	Water, sewer, and utility lines -----	30.1	26.1	94.7	.330	.326	.105	.319	.027
1629	Heavy construction, n.e.c. -----	30.5	40.7	145.3	.341	.290	.272	.114	.013
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	10.5	27.8	129.8	.289	.360	.161	.571	.014
1721	Painting and paper hanging -----	6.4	18.5	52.3	.409	.267	.074	.501	.014
1731	Electrical work -----	10.5	26.8	100.6	.346	.408	.025	.637	.013
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	9.4	18.1	52.5	.401	(D)	.036	.828	.015
1742	Plastering, drywall, and insulation work -----	14.6	25.5	77.8	.388	.307	.111	.912	.011
1743	Terrazzo, tile, marble, and mosaic work -----	5.8	26.9	84.0	.409	.393	.018	.726	.023
175	Carpentry and floor work:								
1751	Carpentry -----	5.0	18.3	70.2	.321	.331	.137	.470	.011
1752	Floor laying and other floor work -----	5.6	22.6	137.6	.235	.492	.088	.728	.020
1761	Roofing, siding, and sheet metal work -----	8.9	23.0	83.1	.354	.383	.056	.523	.015
1771	Concrete work -----	11.4	19.1	85.0	.274	.412	.093	.790	.032
1781	Water well drilling -----	9.2	27.5	102.8	.335	.322	.017	.288	.025
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	18.6	30.9	106.2	.349	.361	.054	.797	.018
1793	Glass and glazing work -----	8.3	26.3	132.0	.320	.486	.032	.653	.026
1794	Excavation work -----	7.3	24.1	93.7	.317	.262	.107	.657	.055
1795	Wrecking and demolition work -----	19.7	21.5	89.8	.299	(D)	.093	.484	.053
1796	Installing building equipment, n.e.c. -----	22.9	33.3	126.6	.331	.284	.046	.420	.010
1799	Special trade contractors, n.e.c. -----	9.8	21.5	79.0	.367	.340	.090	.375	.021

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA											
15,16,17	Construction industries	13 010	105 943	3 072 558	12 663 461	9 443 230	6 052 455	3 736 651	3 220 232	163 018	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	2 309	8 868	182 063	1 032 402	732 371	377 108	369 480	300 031	7 495	3	4
1522	Other residential buildings	97	1 003	29 588	139 771	82 251	57 972	27 975	57 520	499	13	10
1531	Operative builders	366	2 767	77 295	985 023	632 627	419 108	278 463	352 396	5 653	4	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	165	2 943	100 243	449 964	246 674	194 050	61 968	203 290	3 201	5	7
1542	Nonresidential buildings, n.e.c.	589	7 924	272 380	2 114 457	746 560	474 380	373 287	1 367 897	6 458	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	175	4 978	161 333	787 298	643 901	401 973	274 208	143 396	25 540	2	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	25	437	21 230	99 544	63 031	47 054	17 364	36 513	939	7	4
1623	Water, sewer, and utility lines	168	5 868	211 645	587 661	525 255	389 636	138 175	62 406	21 085	2	2
1629	Heavy construction, n.e.c.	226	3 526	126 055	527 677	419 197	285 302	150 112	108 480	16 971	5	3
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 828	16 046	510 888	1 681 450	1 441 079	849 431	629 554	240 371	17 100	2	2
1721	Painting and paper hanging	736	3 720	83 383	215 610	202 389	147 992	54 856	13 221	2 282	5	3
1731	Electrical work	1 346	11 310	372 617	1 078 973	1 036 199	670 112	381 387	42 774	12 375	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	639	4 460	110 528	307 555	292 198	194 808	97 827	15 357	3 402	4	4
1742	Plastering, drywall, and insulation work	281	2 746	76 553	221 158	199 875	129 583	73 567	21 284	1 451	4	5
1743	Terrazzo, tile, marble, and mosaic work	135	689	21 628	66 679	(D)	38 736	23 791	(D)	613	6	(D)
175	Carpentry and floor work:											
1751	Carpentry	986	4 346	93 612	361 174	289 994	173 571	118 488	71 180	3 280	5	7
1752	Floor laying and other floor work	263	1 166	28 190	114 342	104 567	53 392	56 511	9 775	999	7	5
1761	Roofing, siding, and sheet metal work	761	4 776	122 776	422 154	385 206	240 706	147 007	36 948	3 285	4	4
1771	Concrete work	672	4 801	112 339	391 724	354 987	211 219	147 824	36 738	7 322	4	4
1781	Water well drilling	45	316	8 685	30 873	(D)	17 797	9 789	(D)	432	7	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	89	1 974	51 920	158 925	138 188	93 524	48 807	20 737	2 078	2	2
1793	Glass and glazing work	110	866	24 974	91 016	86 079	49 478	41 391	4 937	307	9	8
1794	Excavation work	327	1 758	47 872	178 380	152 688	101 472	54 614	25 692	6 055	5	5
1795	Wrecking and demolition work	22	509	14 647	48 788	46 464	37 872	11 275	2 323	994	9	6
1796	Installing building equipment, n.e.c.	83	2 518	78 817	210 002	199 795	159 027	45 521	10 207	1 938	2	2
1799	Special trade contractors, n.e.c.	568	5 628	131 296	360 864	331 742	237 151	103 409	29 121	11 264	4	4
	Atlantic–Cape May, NJ PMSA											
15,16,17	Construction industries	1 032	6 001	176 618	722 675	591 515	367 391	239 927	131 160	7 973	2	2
	(See appropriate State for SIC detail.)											
	Philadelphia, PA–NJ PMSA											
15,16,17	Construction industries	10 203	84 254	2 477 200	10 256 615	7 564 572	4 872 495	2 991 358	2 692 042	128 446	1	1
	(See appropriate State for SIC detail.)											
	Vineland–Millville–Bridgeton, NJ PMSA											
15,16,17	Construction industries	311	1 891	52 851	224 524	178 191	115 784	65 657	46 332	(S)	4	3
	(See appropriate State for SIC detail.)											

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.											
	Wilmington–Newark, DE–MD PMSA											
15,16,17	Construction industries	1 464	13 797	365 890	1 459 648	1 108 951	696 784	439 709	350 697	23 149	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	296	1 214	27 177	121 935	89 414	48 571	41 548	32 521	1 314	11	9
1522	Other residential buildings	(S)	202	4 422	(S)	(D)	(D)	(S)	(D)	(D)	(Z)	(D)
1531	Operative builders	47	507	11 133	144 770	94 402	59 705	39 234	50 368	(D)	14	11
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	30	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c.	72	794	23 039	203 477	94 361	54 623	(S)	109 115	548	6	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	30	1 303	37 728	179 828	149 559	85 812	64 069	30 270	8 752	3	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	19	1 244	45 234	112 877	99 515	74 796	24 812	13 363	2 099	1	1
1629	Heavy construction, n.e.c.	(S)	193	4 742	(D)	(D)	10 047	(D)	(D)	1 011	7	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	147	1 887	50 829	157 469	133 626	86 043	50 682	23 843	1 772	4	3
1721	Painting and paper hanging	104	467	8 760	20 765	19 312	15 402	3 964	1 453	(D)	16	12
1731	Electrical work	130	1 109	33 385	95 624	92 268	57 801	35 219	3 356	546	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	80	647	14 531	39 281	38 343	25 082	13 260	938	832	11	12
1742	Plastering, drywall, and insulation work	(S)	383	8 944	24 035	21 858	13 223	9 380	2 177	(D)	11	8
1743	Terrazzo, tile, marble, and mosaic work	13	(D)	1 460	(D)	(D)	2 441	1 656	(S)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	467	7 415	(S)	(S)	(S)	(S)	3 883	(S)	10	(S)
1752	Floor laying and other floor work	(S)	134	3 212	13 869	(D)	5 820	(S)	(D)	(D)	22	(D)
1761	Roofing, siding, and sheet metal work	74	589	16 187	44 340	42 507	25 595	17 318	1 833	392	7	7
1771	Concrete work	96	680	12 696	38 095	34 086	21 257	12 991	4 009	742	9	7
1781	Water well drilling	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	15	(D)	(D)	25 166	(D)	(D)	(D)	(D)	333	(D)	(D)
1793	Glass and glazing work	*19	(D)	(D)	*5 363	(D)	*2 971	*2 871	(D)	—	(D)	(D)
1794	Excavation work	(S)	271	7 236	31 323	26 448	14 299	12 307	4 875	*1 215	8	10
1795	Wrecking and demolition work	*3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	6	(D)	1 639	(D)	(D)	(D)	1 448	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	(S)	437	9 951	26 752	25 410	17 751	8 335	1 342	421	12	9
	WASHINGTON–BALTIMORE, DC–MD–VA–WV CMSA											
15,16,17	Construction industries	17 387	176 268	4 603 770	20 018 974	14 144 696	8 669 507	6 022 675	5 874 278	192 779	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	3 588	15 929	309 642	1 698 388	1 241 643	695 235	566 367	456 745	20 692	4	4
1522	Other residential buildings	226	1 477	36 166	276 579	138 249	97 076	45 215	138 329	847	9	27
1531	Operative builders	678	7 392	236 515	2 926 613	1 717 507	1 050 013	922 273	1 209 106	11 497	3	3
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	80	1 195	31 408	165 692	90 417	48 216	43 526	75 275	1 460	11	11
1542	Nonresidential buildings, n.e.c.	1 059	18 505	585 079	4 356 708	1 674 712	1 048 575	758 462	2 681 996	14 054	2	2

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.											
15,16, 17	Construction industries—Con.											
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	245	8 767	251 414	1 021 315	792 948	491 292	332 230	228 367	25 055	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	28	1 230	30 403	128 658	93 101	59 929	33 593	35 557	1 847	3	3
1623	Water, sewer, and utility lines -----	232	7 525	195 589	624 327	542 529	356 139	190 347	81 798	17 495	2	2
1629	Heavy construction, n.e.c. -----	252	7 451	302 916	914 799	681 091	437 734	252 784	233 708	9 634	2	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	2 187	24 142	675 399	2 221 471	1 903 537	1 111 170	813 141	317 934	24 730	1	1
1721	Painting and paper hanging-----	1 034	6 502	127 442	311 669	286 571	209 593	78 866	25 098	3 125	5	4
1731	Electrical work -----	1 621	18 541	512 527	1 475 819	1 429 858	841 135	606 962	45 961	17 122	2	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	794	7 256	137 152	351 135	334 418	206 847	129 792	16 717	5 647	3	3
1742	Plastering, drywall, and insulation work -----	547	8 514	218 153	556 510	496 262	322 717	175 708	60 248	6 108	3	2
1743	Terrazzo, tile, marble, and mosaic work -----	193	1 107	27 990	77 320	75 029	42 743	32 750	2 291	*623	8	7
175	Carpentry and floor work:											
1751	Carpentry -----	1 287	7 068	137 931	418 740	356 845	223 581	136 642	61 895	4 777	5	5
1752	Floor laying and other floor work ---	342	1 951	46 253	196 556	178 225	82 497	99 330	18 331	1 344	6	6
1761	Roofing, siding, and sheet metal work -----	790	7 361	172 130	484 263	455 997	272 976	186 542	28 266	4 393	3	3
1771	Concrete work -----	771	8 849	182 629	650 557	590 618	337 123	256 713	59 939	10 278	3	2
1781	Water well drilling -----	45	420	11 647	35 350	35 127	23 589	11 566	(S)	1 160	4	6
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	77	1 420	43 891	120 697	112 610	72 141	41 465	8 087	2 505	7	6
1793	Glass and glazing work -----	121	1 090	28 351	86 542	83 848	44 209	41 570	2 693	311	6	5
1794	Excavation work -----	417	2 874	71 092	244 695	211 045	162 126	62 327	33 649	3 288	7	6
1795	Wrecking and demolition work -----	33	631	13 288	44 454	40 376	32 910	9 327	4 078	842	4	3
1796	Installing building equipment, n.e.c. -	105	3 067	89 574	272 269	262 072	187 194	78 227	10 198	1 040	2	3
1799	Special trade contractors, n.e.c.-----	635	6 003	129 189	357 849	320 061	212 747	116 949	37 788	2 904	5	4
	Baltimore, MD PMSA											
15,16, 17	Construction industries -----	6 647	59 167	1 447 718	6 196 218	4 592 118	2 854 549	1 975 464	1 604 100	74 913	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	1 392	6 082	110 751	699 184	517 614	308 961	215 979	181 569	9 907	7	6
1522	Other residential buildings -----	82	(D)	(D)	(D)	(D)	(D)	(D)	(D)	324	(D)	(D)
1531	Operative builders -----	218	1 972	(D)	(D)	(D)	(D)	225 702	(D)	2 839	5	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	31	437	(D)	(D)	(D)	(D)	20 559	(D)	138	14	(D)
1542	Nonresidential buildings, n.e.c. -----	377	4 388	128 583	1 029 496	381 971	222 460	252 322	647 525	2 554	5	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	100	3 794	107 265	437 484	335 677	208 172	143 415	101 807	14 910	2	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	68	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1629	Heavy construction, n.e.c. -----	113	1 878	(D)	244 027	(D)	118 053	88 647	(D)	6 089	4	(D)

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16,17	WASHINGTON-BALTIMORE, DC-MD-VA-WV CMSA—Con.											
	Baltimore, MD PMSA—Con.											
	Construction industries—Con.											
	Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning	798	8 620	230 323	778 880	679 942	397 709	287 758	98 938	9 295	3	2
	1721 Painting and paper hanging	376	2 139	44 326	110 405	103 883	73 350	31 210	6 522	1 632	6	6
	1731 Electrical work	625	6 281	164 487	451 963	440 630	264 296	179 609	11 333	5 996	3	2
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work	307	2 252	42 159	110 445	(D)	65 578	38 476	(D)	(D)	7	(D)
	1742 Plastering, drywall, and insulation work	205	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1743 Terrazzo, tile, marble, and mosaic work	62	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	175 Carpentry and floor work:											
	1751 Carpentry	538	2 864	49 558	150 026	129 393	86 037	46 123	20 634	1 771	9	7
	1752 Floor laying and other floor work ...	130	583	(D)	48 716	(D)	20 717	24 137	(D)	483	14	(D)
	1761 Roofing, siding, and sheet metal work	363	2 833	59 465	173 893	162 988	96 880	68 484	10 905	1 989	5	4
	1771 Concrete work	267	3 001	66 969	209 222	(D)	114 306	81 519	(D)	3 974	5	(D)
	1781 Water well drilling	23	(D)	7 052	20 390	20 305	(D)	(D)	85	634	(D)	9
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection	32	(D)	(D)	(D)	(D)	(D)	22 790	(D)	907	(D)	(D)
	1793 Glass and glazing work	38	(D)	(D)	(D)	(D)	(D)	(D)	916	(D)	(D)	(D)
	1794 Excavation work	161	935	25 731	73 406	66 934	53 857	16 555	6 472	1 291	10	10
	1795 Wrecking and demolition work	23	464	9 581	(D)	(D)	20 186	(D)	(D)	(D)	5	(D)
	1796 Installing building equipment, n.e.c. ...	47	617	19 845	56 195	(D)	(D)	14 895	(D)	(D)	4	(D)
	1799 Special trade contractors, n.e.c.	255	2 308	42 830	113 753	104 619	73 408	34 549	9 135	1 470	8	9
	Hagerstown, MD PMSA											
	Construction industries	347	3 026	65 872	283 106	206 110	114 847	98 262	76 996	3 806	5	5
	15 Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses	103	344	6 158	34 165	27 936	12 214	15 752	6 228	(S)	24	23
	1522 Other residential buildings	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
	1531 Operative builders	*8	43	(D)	(D)	(D)	(D)	2 701	(D)	8	8	(D)
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses	(S)	287	(D)	(D)	(D)	(D)	(D)	(D)	438	(Z)	(D)
	1542 Nonresidential buildings, n.e.c.	15	412	11 037	82 757	31 236	20 578	10 686	51 521	1 060	11	9
	16 Heavy construction other than building construction—contractors:											
	1611 Highway and street construction	—	—	—	—	—	—	—	—	—	—	—
	162 Heavy construction, except highway:											
	1622 Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
	1623 Water, sewer, and utility lines	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1629 Heavy construction, n.e.c.	4	124	(D)	14 526	13 080	6 690	6 976	(S)	(D)	(Z)	(Z)
	17 Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning	40	265	6 453	20 139	18 813	10 235	8 818	1 326	(S)	18	21
	1721 Painting and paper hanging	(S)	*84	*1 172	*2 950	*2 887	*2 095	*792	63	—	49	47
	1731 Electrical work	(S)	341	8 046	23 821	23 586	12 152	12 527	235	676	11	13
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work	*15	311	6 092	13 923	(D)	9 377	4 444	(D)	(D)	9	(D)
	1742 Plastering, drywall, and insulation work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1743 Terrazzo, tile, marble, and mosaic work	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
	175 Carpentry and floor work:											
	1751 Carpentry	(S)	100	1 822	4 040	3 596	2 545	1 121	444	249	38	32
	1752 Floor laying and other floor work ...	*12	*35	*525	*2 694	(D)	*663	*1 820	(D)	—	43	(D)
	1761 Roofing, siding, and sheet metal work	*19	133	3 189	9 594	9 247	5 309	3 952	347	—	23	29
	1771 Concrete work	*31	200	4 729	20 030	(D)	10 150	8 196	(D)	466	23	(D)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

MARYLAND MD-17

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17 1781	WASHINGTON-BALTIMORE, DC-MD-VA-WV CMSA—Con.											
	Hagerstown, MD PMSA—Con.											
	Construction industries—Con.											
	Special trade contractors—Con.											
	Water well drilling	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
	Miscellaneous special trade contractors:											
	Structural steel erection	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
	Glass and glazing work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
	Excavation work	*7	*62	*1 119	*4 826	*3 838	*2 519	*1 319	988	(D)	61	57
	Wrecking and demolition work	—	—	—	—	—	—	—	—	—	—	—
	Installing building equipment, n.e.c. ..	*6	*51	*1 308	*5 992	(D)	(D)	*2 431	(D)	(D)	51	(D)
	Special trade contractors, n.e.c.	*12	*37	*976	*4 621	*4 001	*1 002	*3 416	*619	(D)	59	71
	Washington, DC-MD-VA-WV PMSA											
	Construction industries	10 393	114 075	3 090 179	13 539 649	9 346 467	5 700 111	3 948 948	4 193 182	114 060	1	1
	Building construction—General contractors and operative builders:											
	General contractors, residential buildings:											
	Single-family houses	2 093	9 503	192 733	965 039	696 093	374 061	334 635	268 947	10 749	5	6
	Other residential buildings	142	1 016	25 381	209 532	99 368	67 967	34 552	110 164	523	9	37
	Operative builders	452	5 377	173 629	2 104 677	1 228 742	702 215	693 870	875 935	8 651	3	4
	General contractors, nonresidential buildings:											
	Industrial buildings and warehouses	45	471	15 366	96 313	47 475	32 419	(D)	48 838	884	24	19
	Nonresidential buildings, n.e.c.	667	13 705	445 460	3 244 455	1 261 505	805 537	495 454	1 982 950	10 441	2	2
16	Heavy construction other than building construction—contractors:											
	Highway and street construction	145	4 973	144 149	583 830	457 271	283 120	188 816	126 559	10 146	3	2
	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction	*10	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Water, sewer, and utility lines	162	5 245	129 511	424 257	369 281	249 331	122 119	54 976	12 942	3	2
	Heavy construction, n.e.c.	(S)	5 450	243 005	656 246	(D)	312 991	157 161	(D)	(D)	2	(D)
	Special trade contractors:											
	Plumbing, heating, and air-conditioning	1 350	15 257	438 623	1 422 452	1 204 782	703 226	516 565	217 671	15 393	2	1
	Painting and paper hanging	637	4 279	81 944	198 314	179 801	134 149	46 864	18 513	1 493	6	4
	Electrical work	975	11 920	339 994	1 000 035	965 642	564 687	414 826	34 393	10 450	2	2
	Masonry, stone work, tile setting, and plastering:											
17	Masonry, stone setting, and other stone work	471	4 693	88 901	226 767	217 210	131 892	86 872	9 557	4 500	4	4
	Plastering, drywall, and insulation work	338	5 597	147 063	373 788	332 416	215 892	118 267	41 372	4 752	4	2
	Terrazzo, tile, marble, and mosaic work	131	846	21 602	62 044	59 951	33 638	26 768	2 093	(D)	9	7
	Carpentry and floor work:											
	Carpentry	731	4 103	86 552	264 674	223 856	134 998	89 399	40 817	2 756	5	6
	Floor laying and other floor work ..	201	1 334	(D)	145 145	130 936	61 117	73 373	14 210	860	6	7
	Roofing, siding, and sheet metal work	409	4 396	109 476	300 776	283 762	170 788	114 107	17 014	2 404	3	3
	Concrete work	473	5 648	110 931	421 305	376 635	212 667	166 998	44 670	5 838	3	3
	Water well drilling	21	(D)	(D)	(D)	(D)	(D)	5 588	(D)	526	(D)	(D)
	Miscellaneous special trade contractors:											
1791	Structural steel erection	43	786	22 353	60 827	55 808	37 994	(D)	5 019	(S)	10	10
	Glass and glazing work	82	750	21 023	63 211	61 434	33 976	29 388	1 777	(D)	8	7
	Excavation work	250	1 877	44 243	166 462	140 273	105 750	44 452	26 190	1 910	9	8
	Wrecking and demolition work	10	167	3 707	(D)	(D)	12 724	(D)	(D)	(D)	(Z)	(D)
	Installing building equipment, n.e.c. ..	52	2 399	68 420	210 083	204 030	143 129	60 901	6 053	870	3	4
	Special trade contractors, n.e.c.	369	3 659	85 383	239 475	211 441	138 336	78 984	28 035	(D)	6	5

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

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North Carolina

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for North Carolina. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 64,482 establishments in this State operating in the construction industries. These establishments accounted for \$15.4 billion in total dollar value of business done.

Most of the 64,482 construction establishments were small. Of the total, 46,054 were nonemployers, and over half of the employer establishments had less than 5 employees. The 6,825 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 77 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$14.1 billion in total dollar value of business done. Of this amount, \$13.9 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$3.4 billion, leaving net value of construction work of \$10.5 billion. In addition, these establishments paid out \$5.4 billion for the cost of

materials, fuels, power, rental of equipment and buildings, and the cost of selected purchased services. Value added for 1992 was \$5.8 billion. (See Introduction and appendixes for explanation of terms.)

There were 18,428 establishments with total employment averaging 145,527 during the year. Total payroll for 1992 was \$3.0 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 46,054 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$1.3 billion. Most of these establishments, about 84 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

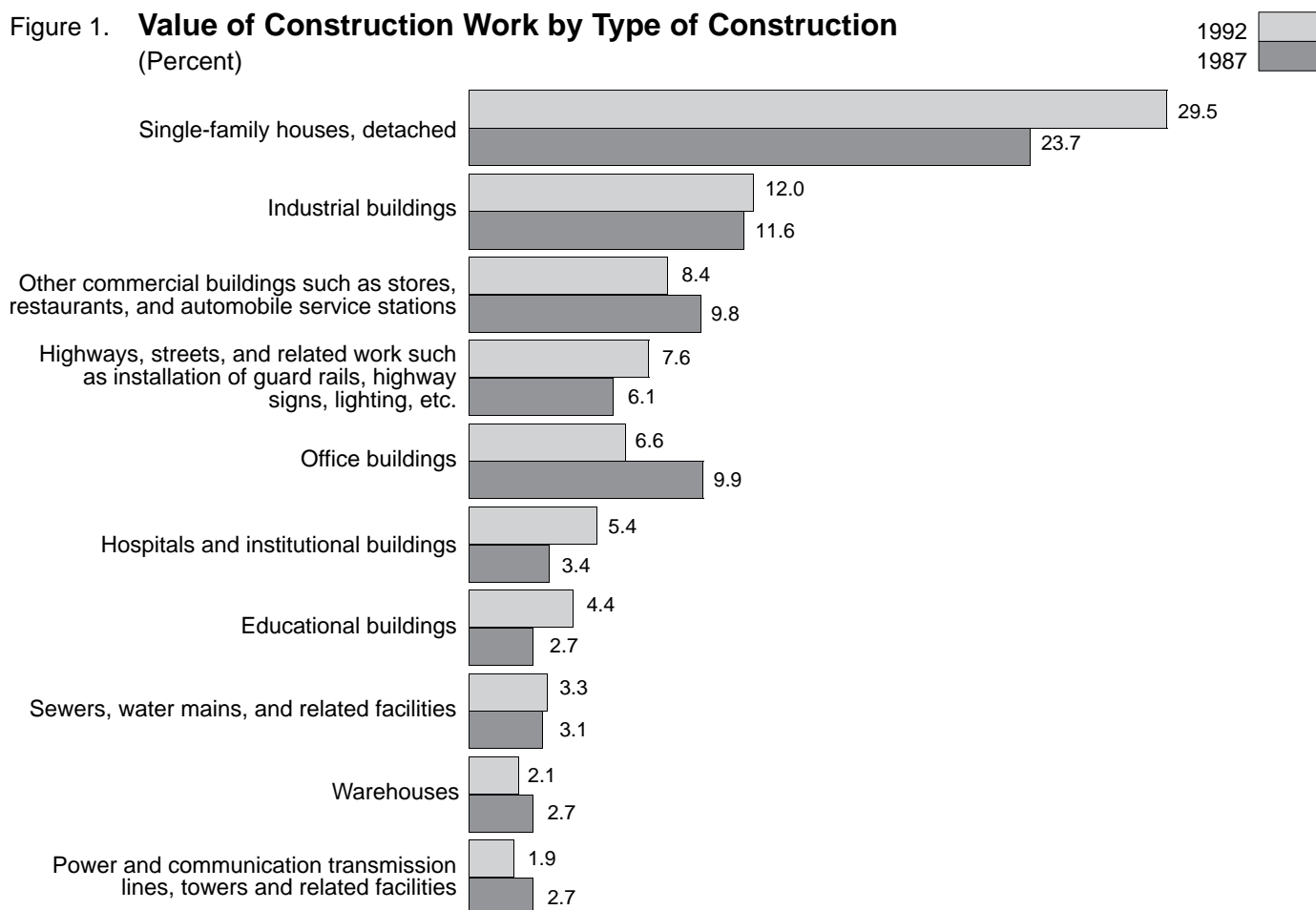


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

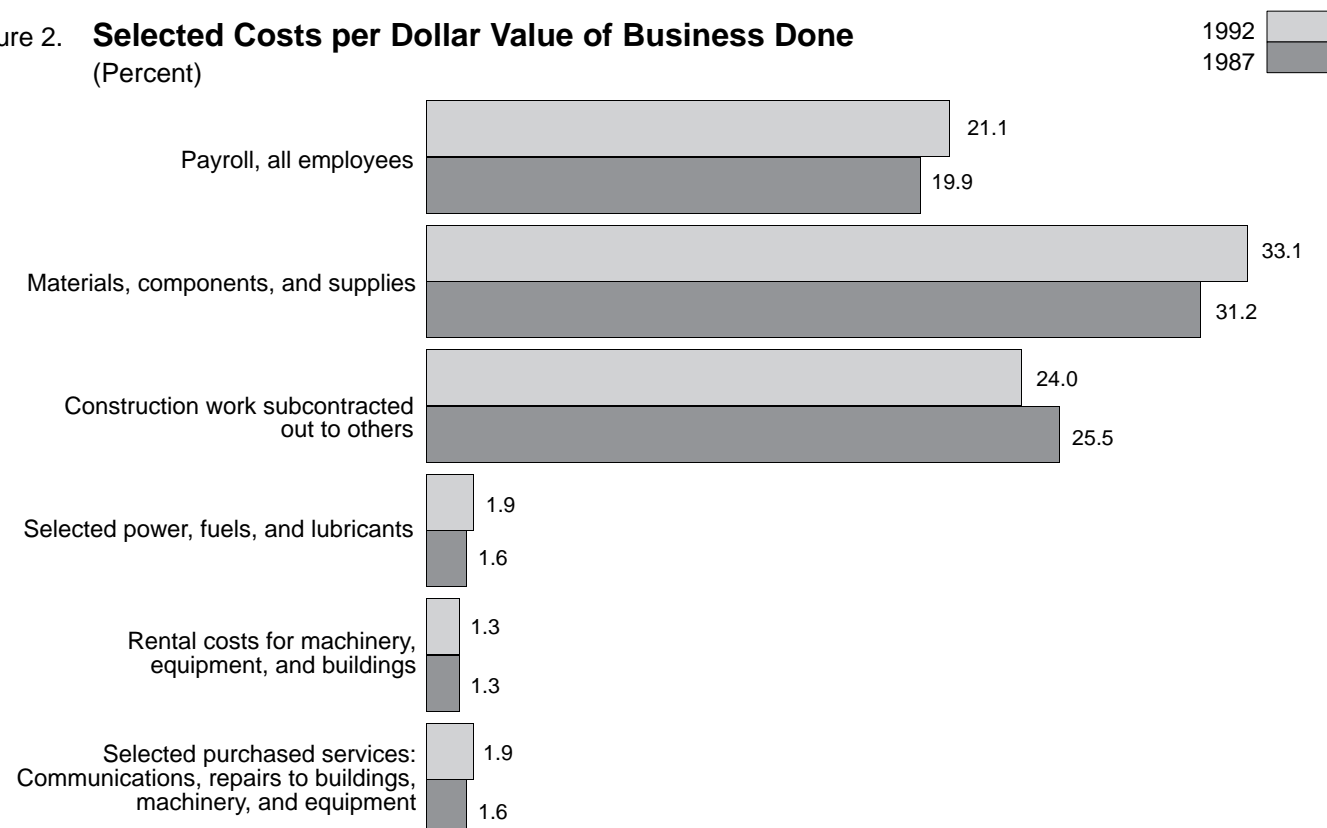


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column —	
			Proprietors and working partners	All employees**	Dollar value of business done		Proprietors and working partners	Dollar value of business done¹		Proprietors and working partners	All employees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	64 482	54 831	145 527	15 374 456	46 054	45 654	1 252 293	18 428	9 177	145 527	14 122 163	1	1
15	Building construction—General contractors and operative builders ----	11 703	8 065	35 823	6 543 702	6 540	6 090	493 377	5 163	1 975	35 823	6 050 325	1	2
16	Heavy construction other than building construction—contractors -----	2 044	1 170	22 649	2 482 640	768	752	23 934	1 276	418	22 649	2 458 706	2	1
17	Special trade contractors -----	50 735	45 596	87 056	6 348 114	38 746	38 812	734 982	11 989	6 784	87 056	5 613 132	1	1
1711	Plumbing, heating, and air-conditioning --	5 693	4 244	25 463	2 097 024	3 152	3 153	88 437	2 541	1 091	25 463	2 008 587	1	2
1731	Electrical work-----	5 039	3 971	15 227	1 013 810	3 179	3 137	52 426	1 860	834	15 227	961 384	2	2
	1987													
15, 16, 17	Construction industries² -----	63 708	51 351	154 844	16 645 666	46 323	46 041	2 160 706	17 385	5 310	154 844	13 484 960	1	1
15	Building construction—General contractors and operative builders ----	13 612	9 192	44 372	7 293 011	8 561	8 087	704 107	5 051	1 105	44 372	6 588 904	1	2
16	Heavy construction other than building construction—contractors -----	1 862	983	24 749	2 068 684	649	649	44 316	1 213	334	24 749	2 024 368	1	1
17	Special trade contractors -----	46 287	39 568	84 629	5 612 119	35 448	35 714	953 925	10 839	3 854	84 629	4 658 194	1	1
1711	Plumbing, heating, and air-conditioning --	5 293	3 690	21 528	1 521 359	2 961	2 994	118 163	2 332	696	21 528	1 403 196	2	1
1731	Electrical work-----	4 300	3 167	16 338	964 586	2 681	2 681	72 593	1 619	486	16 338	891 993	2	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	18 428	145 527	113 374	2 975 840	2 071 720	13 851 639	10 456 584	5 786 198
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3 365	12 408	9 170	201 146	137 521	1 462 602	1 049 820	470 356
1522	Other residential buildings -----	69	587	432	10 654	6 502	62 890	38 510	19 877
1531	Operative builders -----	793	4 330	1 853	116 160	36 645	1 483 880	1 020 346	471 349
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	190	5 480	3 936	122 837	84 329	632 104	392 110	217 183
1542	Nonresidential buildings, n.e.c. -----	745	13 017	9 678	310 356	190 969	2 303 139	1 011 855	486 397
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	324	9 090	7 553	202 792	146 754	1 013 997	788 777	417 695
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	14	599	511	14 097	9 610	71 756	53 013	26 140
1623	Water, sewer, and utility lines -----	423	7 707	6 402	183 928	138 133	643 172	551 599	361 668
1629	Heavy construction, n.e.c. -----	516	5 252	3 954	126 795	79 502	661 190	458 575	322 155
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	2 541	25 463	19 708	579 449	413 223	1 983 422	1 822 909	987 613
1721	Painting and paper hanging -----	1 132	4 961	4 084	79 570	61 324	217 098	199 202	144 822
1731	Electrical work -----	1 860	15 227	12 197	313 705	227 072	948 060	905 650	518 022
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	1 130	6 575	5 893	90 595	77 610	232 548	218 170	148 398
1742	Plastering, drywall, and insulation work -----	515	5 827	4 763	108 527	81 670	357 618	314 441	187 097
1743	Terrazzo, tile, marble, and mosaic work -----	184	835	647	17 521	12 171	59 749	53 586	29 533
175	Carpentry and floor work:								
1751	Carpentry -----	1 186	4 449	3 702	71 698	56 491	264 400	230 758	145 294
1752	Floor laying and other floor work -----	420	1 422	1 140	22 853	17 794	94 948	88 285	47 389
1761	Roofing, siding, and sheet metal work -----	878	5 794	4 642	96 627	67 931	354 002	330 322	189 863
1771	Concrete work -----	680	4 625	3 824	73 077	57 117	269 990	251 611	131 924
1781	Water well drilling -----	127	569	430	10 394	6 960	40 196	39 072	20 944
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	99	1 191	996	22 886	17 355	63 665	58 811	45 505
1793	Glass and glazing work -----	101	887	593	20 241	12 196	63 198	59 655	32 097
1794	Excavation work -----	379	2 225	1 839	41 098	31 868	150 750	132 608	99 472
1795	Wrecking and demolition work -----	*23	321	186	5 553	4 009	16 188	10 957	16 730
1796	Installing building equipment, n.e.c. -----	114	2 232	1 734	51 275	38 602	157 983	149 660	103 113
1799	Special trade contractors, n.e.c. -----	618	4 452	3 508	82 005	58 362	243 096	226 283	145 561

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
4 940 910	3 395 055	3 515 529	185 467	253 014	2 544 345	154 844	12 928 252	5 364 564	1	1	3	15, 16, 17
												15
600 047	412 782	49 580	12 122	12 013	88 639	14 315	1 348 543	452 570	3	4	13	152
19 119	24 380	2 236	467	(S)	3 701	2 492	327 687	86 421	14	15	(S)	1521
598 653	463 534	*12 053	4 456	9 632	141 538	5 786	1 342 046	(D)	5	6	16	1531
186 788	239 994	41 001	7 390	5 245	43 738	8 606	1 248 633	257 847	4	3	20	154
548 583	1 291 283	35 569	19 641	11 854	226 234	13 173	2 026 515	597 499	2	2	8	1542
												16
424 630	225 220	269 091	26 336	42 067	528 383	8 567	837 893	375 077	2	3	8	1611
26 979	18 743	22 375	3 647	2 521	18 246	1 694	144 088	44 494	(Z)	(Z)	(Z)	162
194 646	91 573	151 608	14 037	36 469	311 887	10 347	678 904	413 071	3	3	9	1622
146 641	202 615	162 571	18 827	21 086	191 470	4 141	290 159	171 677	5	3	9	1623
												17
860 462	160 512	853 326	25 578	47 305	383 810	21 528	1 380 772	705 150	1	2	4	1711
57 273	17 896	100 978	(D)	4 652	27 358	5 049	168 080	116 462	5	4	21	1721
400 952	42 410	451 668	10 711	12 756	123 976	16 338	880 489	469 475	2	2	12	1731
(D)	14 378	207 627	2 510	(D)	30 327	7 242	229 150	154 956	5	5	(D)	174
138 234	43 177	292 234	3 962	3 903	35 895	6 092	339 271	177 962	4	4	27	1742
24 188	6 163	53 060	799	559	6 341	1 086	65 373	33 913	4	4	23	1743
90 166	33 642	134 091	(S)	3 941	25 125	4 442	203 491	114 013	6	6	24	175
42 198	6 663	45 569	716	654	8 019	774	46 571	22 317	9	8	12	1751
144 893	23 680	134 440	5 331	6 859	55 414	6 266	310 919	169 277	3	4	38	1761
124 048	18 380	173 247	4 634	8 413	91 107	4 631	247 456	137 446	6	5	20	1771
18 639	*1 124	4 074	454	793	24 543	803	47 870	29 666	11	11	14	1781
15 554	4 854	38 907	2 931	1 847	16 137	1 385	59 395	37 878	11	11	29	179
32 743	3 543	43 522	1 147	445	8 555	1 116	72 739	39 623	6	7	30	1791
39 265	18 142	95 419	4 476	6 689	88 986	2 176	153 057	94 919	7	7	20	1793
(D)	5 231	2 448	(D)	(D)	(D)	357	17 729	(D)	4	25	(D)	1794
48 437	8 323	47 297	2 170	1 078	18 733	1 319	113 296	81 046	4	2	(Z)	1795
(D)	16 813	91 540	5 027	5 703	(D)	4 025	220 988	128 173	5	5	16	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	18 428	17 385	12 700	14 363	(Z)	1	2	2
Proprietors and working partners	9 177	5 310	5 159	9 260	2	3	3	3
All employees**	145 527	154 844	111 741	116 261	1	1	1	1
Construction workers:								
March	110 260	118 337	89 895	93 192	1	1	1	1
May	114 146	124 223	93 604	103 548	1	1	1	1
August	117 451	130 484	93 974	106 968	1	1	1	1
November	111 640	123 576	89 123	99 507	1	1	1	1
Average	113 374	124 155	92 814	100 865	1	1	1	1
Other employees:								
March	33 289	30 280	18 638	14 902	1	1	1	2
May	31 667	30 405	(NA)	(NA)	1	1	(NA)	(NA)
August	31 751	30 874	(NA)	(NA)	1	1	(NA)	(NA)
November	31 905	31 202	(NA)	(NA)	1	2	(NA)	(NA)
Average	32 153	30 690	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	2 975 840	2 680 093	1 496 029	1 031 016	(Z)	1	1	1
Payroll, construction workers	2 071 720	1 914 821	1 121 045	817 350	1	1	1	1
Payroll, other employees	904 120	765 272	374 983	213 667	1	1	1	1
First-quarter payroll, all employees	682 507	598 146	352 983	219 262	1	1	1	1
Fringe benefits, all employees	555 937	455 536	271 326	140 790	1	1	1	1
Legally required expenditures	398 973	342 429	204 666	102 776	1	1	1	1
Voluntary expenditures	156 964	113 107	66 660	38 014	1	1	1	1
Dollar value of business done	14 122 163	13 484 960	6 614 292	4 489 268	1	1	1	1
Value of construction work	13 851 639	12 928 252	6 430 837	4 329 842	1	1	1	1
Value of construction work subcontracted in from others	3 515 529	2 714 452	1 147 018	910 629	2	2	2	1
Other business receipts	270 524	304 597	123 815	159 427	4	3	3	3
Net value of construction†	10 456 584	9 487 132	4 866 088	3 414 120	1	1	1	1
Value added††	5 786 198	5 364 564	2 659 520	1 833 095	1	1	1	1
Selected costs	8 335 965	7 868 285	3 895 132	2 600 238	1	1	1	1
Materials, components, and supplies	4 672 091	4 207 024	2 181 097	1 592 509	1	1	1	1
Construction work subcontracted out to others	3 395 055	3 441 119	1 564 749	915 722	1	1	1	1
Selected power, fuels, and lubricants	268 819	220 141	149 285	92 007	1	1	1	1
Electricity	43 779	31 546	18 563	10 025	2	3	2	3
Natural gas	11 462	6 223	3 612	3 853	3	5	4	4
Gasoline and diesel fuel	194 369	167 624	116 167	68 876	1	1	1	1
On highway use	146 121	123 654	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use	48 248	43 970	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases	19 209	14 747	10 943	9 253	3	2	2	3
Rental cost for machinery, equipment, and buildings	185 467	179 901	78 231	54 597	3	2	1	2
For machinery and equipment	125 845	133 209	61 583	46 523	4	2	2	2
For buildings	59 622	46 692	16 647	8 074	3	3	2	2
Selected purchased services	271 862	214 801	111 078	101 657	2	2	1	1
Communication services	78 797	53 385	27 720	19 177	4	2	2	2
Repairs to buildings and other structures	13 214	11 251	5 672	4 094	5	3	6	10
Repairs to machinery and equipment	179 850	150 163	77 686	78 386	2	2	1	1
Ownership of construction projects:								
Value of construction work	13 851 639	12 928 252	6 430 837	4 329 842	1	1	1	1
Government owned	2 958 636	2 005 317	1 362 700	1 072 155	2	2	2	1
Federal	581 434	658 525	(NA)	(NA)	4	3	(NA)	(NA)
State and local	2 377 202	1 346 792	(NA)	(NA)	2	3	(NA)	(NA)
Privately owned	10 893 004	10 922 934	5 068 137	3 257 687	2	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	2 417 904	1 805 920	2	2
Capital expenditures, other than land -----	253 014	284 885	3	3
New -----	190 878	231 836	3	3
Used -----	62 135	53 048	7	5
Retirements and disposition of depreciable assets -----	126 573	86 568	6	4
End-of-year gross book value of depreciable assets -----	2 544 345	2 004 237	2	2
Depreciation charges during year -----	261 028	253 761	3	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	389 768	387 432	11	5
Capital expenditures, other than land -----	20 802	51 714	10	10
New buildings and other structures -----	14 360	41 740	12	12
Used buildings and other structures -----	6 442	9 974	16	13
Retirements and disposition of depreciable assets -----	9 518	19 136	24	8
End-of-year gross book value of depreciable assets -----	401 052	420 011	11	5
Depreciation charges during year -----	38 237	40 510	15	8
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	2 028 136	1 418 487	2	2
Capital expenditures, other than land -----	232 211	233 171	3	3
New machinery and equipment, including automobiles and trucks -----	176 518	190 096	3	3
New automobiles and trucks, intended primarily for highway use -----	77 781	94 037	4	3
Used machinery and equipment, including automobiles and trucks -----	55 694	43 074	8	5
Retirements and disposition of depreciable assets -----	117 054	67 432	6	4
End-of-year gross book value of depreciable assets -----	2 143 293	1 584 226	2	2
Depreciation charges during year -----	222 791	213 251	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	18 428	(Z)
Value of construction work	13 851 639	1
Establishments with inventories:		
Number	5 124	2
Value of construction work	5 761 061	1
Inventories ¹ :		
End of 1992, materials and supplies	254 153	7
End of 1991, materials and supplies	236 600	9
Establishments with no inventories:		
Number	6 748	2
Value of construction work	5 376 784	1
Establishments not reporting:		
Number	6 556	2
Value of construction work	2 713 794	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	18 428	11 604	3 628	1 893	937	242	94	20	8	3	
All employees** -----	145 527	23 078	23 184	24 823	27 622	16 695	13 862	6 706	9 558	(D)	
Payroll, all employees -----	2 975 840	332 130	387 125	460 385	619 182	391 618	356 727	186 406	242 267	(D)	
Dollar value of business done -----	14 122 163	2 283 377	1 796 100	2 023 740	2 710 041	1 814 665	1 563 111	843 151	1 087 978	(D)	
Value of construction work -----	13 851 639	2 249 401	1 773 430	1 984 386	2 656 608	1 786 734	1 506 091	833 966	1 061 022	(D)	
Net value of construction work† -----	10 456 584	1 804 610	1 430 366	1 609 751	2 016 832	1 298 917	1 099 543	1 196 566	(D)	(D)	
Value added†† -----	5 786 198	908 126	799 113	870 925	1 104 353	717 500	663 978	300 430	421 774	(D)	
Cost of materials, components, supplies, and fuels -----	4 940 910	930 459	653 923	778 180	965 912	609 348	492 585	510 503	(D)	(D)	
Cost of construction work subcontracted out to others -----	3 395 055	444 792	343 064	374 635	639 776	487 818	406 548	698 422	(D)	(D)	
Rental cost for machinery, equipment, and buildings -----	185 467	18 282	23 347	26 327	39 949	18 403	26 709	11 912	20 539	(D)	
Capital expenditures, other than land -----	253 014	30 730	26 995	40 561	43 056	21 161	27 453	16 668	46 389	(D)	
End-of-year gross book value of depreciable assets -----	2 544 345	314 662	277 614	353 670	472 618	289 997	290 285	183 786	361 713	(D)	
1987											
All employees** -----	154 844	(S)	24 595	25 854	29 571	18 396	16 997	9 457	9 534	(D)	
Value of construction work -----	12 928 252	(S)	1 600 292	1 935 007	2 362 406	1 695 982	1 547 040	2 075 831	(D)	(D)	
Value added†† -----	5 364 564	(S)	699 385	852 009	1 065 171	710 441	619 584	396 100	316 840	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	3	4	4	2	1	(Z)	(Z)	(Z)	(D)	
Net value of construction work† -----	1	4	4	4	1	(Z)	(Z)	(Z)	(D)	(D)	
Capital expenditures, other than land -----	3	9	15	11	5	(Z)	(Z)	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	18 428	(S)	(S)	2 928	5 271	2 917	2 010	1 609	545	235	175
All employees** -----	145 527	(S)	(S)	6 039	17 085	16 528	17 741	24 665	16 157	13 747	30 329
Payroll, all employees -----	2 975 840	(S)	(S)	60 098	221 821	267 031	325 444	528 361	380 444	354 235	813 272
Dollar value of business done -----	14 122 163	(S)	(S)	213 792	847 045	1 045 588	1 392 067	2 442 319	1 849 775	1 589 110	4 663 974
Value of construction work -----	13 851 639	(S)	(S)	212 823	837 147	1 035 441	1 368 543	2 392 463	1 803 607	1 564 994	4 558 668
Net value of construction work† -----	10 456 584	(S)	(S)	198 013	757 432	904 111	1 154 435	1 933 835	1 414 364	1 182 659	2 839 097
Value added†† -----	5 786 198	(S)	(S)	122 404	450 763	498 181	631 330	1 016 627	752 002	671 370	1 597 630
Cost of materials, components, supplies, and fuels -----	4 940 910	(S)	(S)	76 578	316 567	416 078	546 630	967 064	708 530	535 405	1 346 773
Cost of construction work subcontracted out to others -----	3 395 055	(S)	(S)	(S)	79 715	131 329	214 108	458 628	389 242	382 335	1 719 571
Rental cost for machinery, equipment, and buildings -----	185 467	(S)	(S)	(S)	9 133	13 833	18 369	36 538	20 959	20 829	63 005
Capital expenditures, other than land -----	253 014	(S)	(S)	(S)	18 154	16 167	25 047	43 150	33 900	25 905	85 417
End-of-year gross book value of depreciable assets -----	2 544 345	(S)	(S)	32 923	147 500	174 456	239 034	429 733	367 891	273 050	865 533
1987											
All employees** -----	154 844	(S)	(S)	(S)	17 379	17 640	18 415	24 795	19 453	13 714	32 687
Value of construction work -----	12 928 252	(S)	(S)	(S)	708 455	940 684	1 263 623	2 143 781	1 751 131	1 539 845	4 279 843
Value added†† -----	5 364 564	(S)	(S)	(S)	392 338	473 972	580 258	926 389	756 914	608 607	1 449 162
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	6	4	4	4	3	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	4	3	4	4	4	4	3	(Z)
Capital expenditures, other than land -----	3	(S)	(S)	(S)	12	11	12	11	8	2	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

NC-10 NORTH CAROLINA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	13 851 639	9 361 345	2 569 579	1 425 125	1	1	1	2
Building construction	10 474 445	7 317 057	2 072 917	1 084 471	1	1	2	2
Single-family houses	4 318 544	3 437 340	545 918	335 285	2	3	4	5
Single-family houses, detached	4 093 080	3 290 604	505 466	297 010	2	3	5	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	225 464	146 736	40 453	38 275	7	9	10	15
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	221 292	123 945	47 058	50 288	5	7	6	10
Other residential buildings, including hotels, motels, and tourist cabins	82 925	50 901	(S)	14 080	8	7	(S)	11
Office buildings	916 674	559 666	255 389	101 619	2	2	4	4
Other commercial buildings such as stores, restaurants, and automobile service stations	1 164 413	738 209	284 875	141 329	3	3	4	5
Industrial buildings and warehouses	1 951 979	1 115 535	508 920	327 524	1	2	2	2
Industrial buildings	1 662 701	903 523	450 724	308 454	1	1	2	2
Warehouses	289 278	212 011	58 197	19 069	4	5	6	10
Religious buildings	205 274	129 163	51 744	24 367	5	6	6	10
Educational buildings	616 381	429 680	148 244	38 457	2	2	5	8
Hospitals and institutional buildings	754 401	549 514	169 472	35 414	1	2	2	7
Other nonresidential buildings	242 563	183 103	43 352	16 109	6	7	8	17
Nonbuilding construction	2 881 605	2 044 288	496 662	340 654	1	1	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 047 427	715 299	197 583	134 545	2	3	2	5
Private driveways and parking areas	123 728	(D)	24 078	(D)	9	(D)	10	(D)
Bridges, tunnels, and elevated highways	182 096	139 111	36 031	6 955	1	1	1	18
Power and communication transmission lines, towers, and related facilities	260 713	140 654	42 878	77 180	4	4	7	4
Sewers, water mains, and related facilities	452 623	396 547	23 459	32 617	4	4	8	16
Sewers, sewer lines, septic systems, and related facilities	272 404	238 797	13 117	20 491	5	5	6	21
Water mains and related facilities	180 219	157 750	10 342	12 127	6	7	16	24
Power plants	210 752	(D)	6 803	(D)	1	(D)	20	(D)
Sewage treatment and water treatment plants	112 814	86 635	22 663	3 516	5	3	18	21
Other nonbuilding construction	491 451	299 554	143 166	48 731	3	3	2	10
Construction work, n.s.k.	495 590	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1987								
Value of construction work	12 928 252	9 147 510	1 984 259	1 121 025	1	1	1	2
Building construction	9 833 754	7 497 545	1 602 776	733 434	1	1	2	2
Single-family houses	3 415 987	2 815 355	379 220	221 411	2	3	4	4
Single-family houses, detached	3 060 417	2 513 965	349 143	197 308	2	3	4	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	355 570	301 390	30 076	24 103	6	7	13	9
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	558 445	487 899	45 426	25 119	8	9	15	8
Other residential buildings, including hotels, motels, and tourist cabins	330 260	255 409	47 355	27 495	4	4	9	10
Office buildings	1 275 968	998 999	211 341	65 627	2	2	5	3
Other commercial buildings such as stores, restaurants, and automobile service stations	1 261 093	934 344	227 144	99 604	2	2	3	6
Industrial buildings and warehouses	1 844 987	1 203 040	425 515	216 431	1	2	2	3
Industrial buildings	1 502 196	938 997	368 310	194 888	2	2	2	3
Warehouses	342 790	264 043	57 204	21 542	2	3	5	5
Religious buildings	151 186	98 597	40 645	11 943	5	5	7	8
Educational buildings	343 163	237 938	82 149	23 074	4	5	4	4
Hospitals and institutional buildings	443 026	298 860	116 370	27 796	9	13	3	4
Other nonresidential buildings	209 639	167 104	27 611	14 934	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	2 419 040	1 649 964	381 483	387 592	1	2	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	794 862	533 632	103 844	157 385	2	2	3	1
Bridges, tunnels, and elevated highways	165 154	(D)	(D)	* 4 153	4	(D)	(D)	45
Power and communication transmission lines, towers, and related facilities	342 887	183 931	69 374	89 582	2	3	2	2
Sewers, water mains, and related facilities	401 523	330 477	41 630	29 415	4	4	9	6
Sewers, sewer lines, septic systems, and related facilities	220 660	181 797	25 197	13 665	4	4	10	8
Water mains and related facilities	180 863	148 680	16 433	15 749	5	6	11	7
Power plants	44 300	22 251	3 982	18 066	3	3	15	3
Sewage treatment and water treatment plants	75 436	50 884	20 038	4 514	7	6	18	35
Other nonbuilding construction	594 878	(D)	(D)	84 477	(NA)	(D)	(D)	(NA)
Construction work, n.s.k.	675 457	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. **Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	18 428	113 374	110 260	114 146	117 451	111 640	(Z)	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	3 365	9 170	9 051	9 321	9 497	8 810	3	4	3	4	4	4
1522	Other residential buildings -----	69	432	444	460	420	404	22	16	14	17	16	17
1531	Operative builders -----	793	1 853	1 894	1 872	1 915	1 731	7	7	7	7	7	7
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	190	3 936	5 053	3 660	3 532	3 497	12	4	3	5	5	4
1542	Nonresidential buildings, n.e.c. ----	745	9 678	9 848	9 754	9 921	9 190	6	2	2	2	2	2
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	324	7 553	6 316	7 834	8 247	7 814	9	2	2	3	3	2
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	14	511	476	540	534	494	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	423	6 402	6 212	6 159	6 470	6 766	8	3	3	3	4	3
1629	Heavy construction, n.e.c. -----	516	3 954	3 654	4 086	4 073	4 002	8	5	6	5	5	5
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	2 541	19 708	18 292	19 836	20 766	19 937	2	1	1	1	2	1
1721	Painting and paper hanging -----	1 132	4 084	3 720	4 192	4 441	3 984	4	5	5	5	5	5
1731	Electrical work -----	1 860	12 197	12 025	12 209	12 539	12 016	2	2	2	2	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	1 130	5 893	5 888	6 011	6 031	5 644	3	5	5	5	5	5
1742	Plastering, drywall, and insulation work -----	515	4 763	4 735	4 703	4 851	4 765	5	3	4	4	4	4
1743	Terrazzo, tile, marble, and mosaic work -----	184	647	712	618	645	614	8	5	10	4	4	4
175	Carpentry and floor work:												
1751	Carpentry -----	1 186	3 702	3 595	3 846	3 932	3 434	4	6	6	6	7	6
1752	Floor laying and other floor work --	420	1 140	1 135	1 156	1 231	1 037	6	9	8	8	8	9
1761	Roofing, siding, and sheet metal work -----	878	4 642	4 517	4 602	4 767	4 680	4	4	4	4	4	4
1771	Concrete work -----	680	3 824	3 384	3 965	4 048	3 900	5	5	5	5	5	6
1781	Water well drilling -----	127	430	416	436	443	427	12	11	12	11	11	12
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	99	996	938	1 094	1 001	951	14	11	11	13	11	11
1793	Glass and glazing work -----	101	593	586	593	619	574	6	7	8	7	7	8
1794	Excavation work -----	379	1 839	1 893	1 787	1 934	1 739	9	7	11	6	7	7
1795	Wrecking and demolition work -----	*23	186	178	187	199	181	41	24	25	24	23	25
1796	Installing building equipment, n.e.c. -----	114	1 734	2 021	1 659	1 714	1 541	10	4	3	4	4	4
1799	Special trade contractors, n.e.c. ----	618	3 508	3 277	3 567	3 680	3 508	7	5	5	5	5	5

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	7.9	20.4	122.2	.215	.357	.245	.254	.013
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.7	16.2	159.5	.138	.410	.282	.034	.008
1522	Other residential buildings -----	8.5	18.2	145.6	.169	.304	.388	.036	.007
1531	Operative builders -----	5.5	26.8	800.8	.078	.403	.312	*.008	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	28.8	22.4	160.6	.194	.296	.380	.065	.012
1542	Nonresidential buildings, n.e.c. -----	17.5	23.8	238.0	.135	.238	.561	.015	.009
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	28.1	22.3	134.3	.200	.419	.222	.265	.026
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	42.8	23.5	140.4	.196	.376	.261	.312	.051
1623	Water, sewer, and utility lines -----	18.2	23.9	100.5	.286	.303	.142	.236	.022
1629	Heavy construction, n.e.c. -----	10.2	24.1	167.2	.192	.222	.306	.246	.028
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	10.0	22.8	100.6	.292	.434	.081	.430	.013
1721	Painting and paper hanging -----	4.4	16.0	53.2	.367	.264	.082	.465	(D)
1731	Electrical work -----	8.2	20.6	77.7	.331	.423	.045	.476	.011
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.8	13.8	39.5	.390	(D)	.062	.893	.011
1742	Plastering, drywall, and insulation work -----	11.3	18.6	75.1	.303	.387	.121	.817	.011
1743	Terrazzo, tile, marble, and mosaic work -----	4.5	21.0	92.3	.293	.405	.103	.888	.013
175	Carpentry and floor work:								
1751	Carpentry -----	3.8	16.1	71.4	.271	.341	.127	.507	(S)
1752	Floor laying and other floor work -----	3.4	16.1	83.3	.241	.444	.070	.480	.008
1761	Roofing, siding, and sheet metal work -----	6.6	16.7	76.3	.273	.409	.067	.380	.015
1771	Concrete work -----	6.8	15.8	70.6	.271	.459	.068	.642	.017
1781	Water well drilling -----	4.5	18.3	93.5	.259	.464	.028	.101	.011
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	12.0	19.2	63.9	.359	.244	.076	.611	.046
1793	Glass and glazing work -----	8.8	22.8	106.6	.320	.518	.056	.689	.018
1794	Excavation work -----	5.9	18.5	82.0	.273	.260	.120	.633	.030
1795	Wrecking and demolition work -----	14.0	17.3	87.0	.343	(D)	.323	.151	(D)
1796	Installing building equipment, n.e.c. -----	19.6	23.0	91.1	.325	.307	.053	.299	.014
1799	Special trade contractors, n.e.c. -----	7.2	18.4	69.3	.337	(D)	.069	.377	.021

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHARLOTTE–GASTONIA–ROCK HILL, NC–SC MSA											
15,16, 17	Construction industries -----	3 507	35 793	820 669	3 891 328	2 727 292	1 524 019	1 258 910	1 164 036	62 675	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	471	1 819	31 844	270 911	196 167	84 624	113 403	74 745	1 816	7	8
1522	Other residential buildings -----	(S)	125	2 019	13 169	7 479	4 216	3 416	5 690	(D)	(Z)	(Z)
1531	Operative builders -----	156	956	32 107	340 774	209 948	103 767	116 121	130 826	975	7	7
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	48	1 109	26 214	135 442	(D)	51 713	37 915	(D)	*2 117	10	(D)
1542	Nonresidential buildings, n.e.c. -----	204	4 278	105 054	787 959	275 089	132 517	142 894	512 869	2 295	4	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	49	2 263	54 637	253 903	205 254	82 978	133 932	48 649	15 114	2	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	87	2 244	58 891	214 670	171 487	108 830	67 291	43 183	7 818	3	3
1629	Heavy construction, n.e.c. -----	79	1 788	60 973	(D)	(D)	194 106	58 399	(D)	12 937	5	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning -----	521	5 868	143 046	483 839	437 903	221 650	222 824	45 936	4 834	2	3
1721	Painting and paper hanging -----	256	1 244	21 691	56 785	52 393	38 889	13 643	4 392	(S)	7	6
1731	Electrical work -----	340	3 222	76 449	206 933	200 949	119 763	83 296	5 983	2 523	4	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work -----	177	1 364	26 554	66 110	63 200	41 265	22 136	2 910	(S)	8	7
1742	Plastering, drywall, and insulation work -----	131	1 929	39 528	126 022	110 633	68 181	47 105	15 389	2 321	5	6
1743	Terrazzo, tile, marble, and mosaic work -----	34	239	5 564	16 520	14 943	8 301	6 735	*1 577	(D)	6	6
175	Carpentry and floor work:											
1751	Carpentry -----	243	989	16 670	77 102	62 836	40 663	23 094	14 266	(S)	13	13
1752	Floor laying and other floor work -----	89	(S)	(S)	(S)	(S)	12 727	(S)	(S)	(S)	(S)	(S)
1761	Roofing, siding, and sheet metal work -----	141	1 283	23 377	74 141	70 622	37 590	34 495	3 519	488	7	8
1771	Concrete work -----	148	1 182	18 219	66 468	62 930	34 742	28 188	3 538	(S)	9	10
1781	Water well drilling -----	13	63	(D)	5 875	5 705	(D)	(D)	170	*85	11	12
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	19	304	6 441	17 434	16 768	13 365	3 403	*667	127	26	21
1793	Glass and glazing work -----	32	375	9 012	30 551	(D)	14 257	14 344	(D)	*104	9	(D)
1794	Excavation work -----	61	485	10 990	32 898	27 632	21 825	6 880	5 266	*1 700	8	5
1795	Wrecking and demolition work -----	(S)	(D)	(S)	(D)	(D)	(S)	(S)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c. -----	31	1 017	19 068	72 155	(D)	42 191	24 926	(D)	212	(Z)	(D)
1799	Special trade contractors, n.e.c. -----	159	1 198	22 510	73 900	67 693	39 103	28 997	6 207	1 849	7	8
	GREENSBORO–WINSTON-SALEM–HIGH POINT, NC MSA											
15,16, 17	Construction industries -----	3 082	24 402	540 844	2 313 434	1 822 978	1 047 370	845 053	490 456	44 231	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	524	1 770	29 613	212 392	152 971	71 620	83 673	59 421	(S)	8	12
1522	Other residential buildings -----	3	37	(D)	(D)	(D)	(D)	(D)	(D)	63	(Z)	(D)
1531	Operative builders -----	145	779	20 253	263 118	194 732	81 382	128 584	68 386	1 533	9	13
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	40	720	18 080	118 296	61 556	27 075	34 659	56 740	1 170	11	10
1542	Nonresidential buildings, n.e.c. -----	143	1 756	50 177	329 387	161 039	88 693	82 187	168 348	1 903	7	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	52	780	14 471	97 637	81 555	53 840	37 206	16 082	6 982	9	19
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	70	1 586	45 365	152 711	140 223	(S)	33 771	12 488	12 999	8	6
1629	Heavy construction, n.e.c. -----	43	484	10 662	50 079	44 673	21 327	23 350	5 406	816	8	7

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work subcontracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	GREENSBORO-WINSTON-SALEM-HIGH POINT, NC MSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	429	5 112	133 194	421 716	379 199	201 605	184 861	42 516	4 709	3	3
1721	Painting and paper hanging	231	956	16 141	40 291	(D)	28 530	10 584	(D)	299	10	(D)
1731	Electrical work	279	2 799	60 285	175 687	166 532	101 638	65 859	9 155	1 989	4	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	161	938	12 732	29 006	26 896	17 827	9 645	2 110	(S)	15	16
1742	Plastering, drywall, and insulation work	129	1 170	20 895	64 432	59 377	36 611	24 802	(S)	628	9	9
1743	Terrazzo, tile, marble, and mosaic work	44	215	4 247	10 448	9 771	6 181	3 592	*677	(S)	13	15
175	Carpentry and floor work:											
1751	Carpentry	148	514	9 220	28 909	26 351	17 768	10 168	2 558	416	16	12
1752	Floor laying and other floor work	83	245	3 932	16 267	14 733	9 106	6 610	1 535	108	20	19
1761	Roofing, siding, and sheet metal work	184	1 269	22 441	92 626	82 643	47 077	37 712	9 983	3 716	9	14
1771	Concrete work	128	844	15 219	56 838	52 409	30 540	22 893	4 430	1 502	14	7
1781	Water well drilling	21	(D)	1 168	5 345	5 328	2 698	2 856	17	(D)	(D)	26
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	26	422	9 182	22 529	19 820	18 702	2 714	2 709	1 364	20	15
1793	Glass and glazing work	17	182	3 627	8 431	(D)	5 769	4 593	(D)	58	20	(D)
1794	Excavation work	65	452	8 916	33 482	27 956	20 956	8 407	5 526	1 184	15	16
1795	Wrecking and demolition work	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	14	204	6 517	16 688	16 055	9 532	6 528	633	150	(Z)	(Z)
1799	Special trade contractors, n.e.c.	101	849	18 000	44 512	40 851	26 429	15 093	3 660	898	12	11
	RALEIGH-DURHAM-CHAPEL HILL, NC MSA											
15,16,17	Construction industries	2 812	22 388	472 491	2 356 262	1 754 111	970 371	810 399	602 151	27 578	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	511	1 696	30 303	243 787	164 670	73 595	92 869	79 117	927	11	11
1522	Other residential buildings	(S)	38	889	(D)	(D)	1 449	(D)	(D)	(D)	(Z)	(D)
1531	Operative builders	175	1 056	28 631	461 666	329 936	157 396	183 414	131 730	3 840	8	11
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	743	22 206	97 462	49 667	36 378	13 638	47 795	562	5	6
1542	Nonresidential buildings, n.e.c.	101	1 701	45 904	377 692	169 164	75 311	95 484	208 527	1 581	4	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	34	1 056	21 853	110 306	(D)	45 306	36 976	(D)	(S)	3	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	61	1 131	23 669	81 517	72 905	41 533	31 613	8 612	3 347	7	8
1629	Heavy construction, n.e.c.	91	470	8 741	32 393	29 120	20 044	9 825	3 273	1 655	15	17
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	356	3 675	85 060	327 224	286 951	154 087	133 780	40 273	3 527	4	4
1721	Painting and paper hanging	200	1 149	19 049	55 405	49 463	34 500	14 995	(S)	2 124	14	10
1731	Electrical work	305	2 614	57 086	159 537	151 220	93 368	63 200	8 317	2 552	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	140	1 111	14 655	41 894	39 033	26 620	12 440	*2 861	399	16	17
1742	Plastering, drywall, and insulation work	73	1 214	25 862	78 718	68 144	40 893	27 360	10 574	(S)	7	4
1743	Terrazzo, tile, marble, and mosaic work	23	209	5 315	22 363	(D)	9 323	9 616	(D)	(D)	4	(D)
175	Carpentry and floor work:											
1751	Carpentry	210	(S)	(S)	(S)	(S)	(S)	15 256	(S)	(S)	(S)	(S)
1752	Floor laying and other floor work	(S)	362	5 629	19 882	18 871	10 116	8 865	1 011	155	20	16
1761	Roofing, siding, and sheet metal work	149	974	15 695	57 348	54 269	35 329	19 256	3 079	319	8	6

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	RALEIGH-DURHAM-CHAPEL HILL, NC MSA—Con.											
15,16, 17	Construction industries—Con.											
17	Special trade contractors—Con.											
1771	Concrete work	74	612	10 545	30 033	28 520	16 632	11 888	1 513	*798	13	13
1781	Water well drilling	(S)	42	971	3 270	(D)	1 933	1 213	(D)	172	11	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(S)	(S)
1793	Glass and glazing work	(S)	113	(S)	10 212	(S)	(S)	*6 372	*614	(D)	22	(S)
1794	Excavation work	(S)	393	6 828	23 356	21 083	17 007	4 992	2 273	1 545	18	8
1795	Wrecking and demolition work	*5	*6	*44	(D)	(D)	*294	*81	(D)	(D)	59	(D)
1796	Installing building equipment, n.e.c. ..	12	231	7 412	20 673	(D)	15 295	4 035	(D)	314	(Z)	(D)
1799	Special trade contractors, n.e.c.	93	667	12 363	35 522	33 956	23 940	10 173	1 566	1 299	13	12
	NORFOLK-VIRGINIA BEACH-NEWPORT NEWS, VA-NC MSA											
15,16, 17	Construction industries	3 475	31 916	661 209	3 264 139	2 370 699	1 311 542	1 107 870	893 440	37 724	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	618	1 945	32 464	281 541	189 762	80 358	111 758	91 779	(S)	9	13
1522	Other residential buildings	62	566	11 690	81 345	40 374	16 639	23 880	*40 971	433	17	19
1531	Operative builders	153	1 356	34 587	545 208	383 373	262 391	143 290	161 834	(S)	13	10
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	571	15 070	96 276	60 619	29 503	31 697	35 658	(S)	9	12
1542	Nonresidential buildings, n.e.c.	132	2 180	57 306	551 452	191 636	76 171	119 639	359 816	3 125	4	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	56	1 902	43 906	184 283	139 793	63 672	82 879	44 490	4 007	5	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	8	329	8 677	37 456	31 907	11 472	20 450	5 549	391	(Z)	(Z)
1623	Water, sewer, and utility lines	59	1 330	27 646	93 246	84 772	54 914	30 655	8 475	2 632	6	6
1629	Heavy construction, n.e.c.	87	2 419	66 520	216 101	172 139	106 150	66 529	43 962	4 275	5	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	478	4 169	90 488	329 514	294 906	157 417	141 256	34 609	4 136	4	3
1721	Painting and paper hanging	248	1 823	29 840	82 257	73 970	54 415	19 730	8 287	(S)	6	5
1731	Electrical work	300	2 839	59 202	191 267	183 953	97 864	86 299	7 315	1 629	4	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	181	1 958	27 234	73 080	66 810	36 152	30 658	(S)	1 521	11	10
1742	Plastering, drywall, and insulation work	137	1 440	30 229	92 321	81 340	46 963	34 948	10 980	995	7	7
1743	Terrazzo, tile, marble, and mosaic work	34	332	5 344	14 865	14 716	7 058	7 889	149	96	22	8
175	Carpentry and floor work:											
1751	Carpentry	276	1 352	22 140	75 354	63 755	35 811	27 999	(S)	569	9	7
1752	Floor laying and other floor work ..	66	283	4 741	16 450	14 549	9 079	6 141	*1 900	*190	13	11
1761	Roofing, siding, and sheet metal work	148	1 617	28 907	93 511	90 715	48 721	42 068	2 796	2 056	7	6
1771	Concrete work	119	1 033	17 206	55 759	51 140	30 308	21 281	4 619	(S)	12	11
1781	Water well drilling	10	*56	*1 091	*4 423	*4 349	2 151	*2 198	(S)	(D)	41	46
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	20	276	5 265	13 197	12 026	8 790	4 210	1 171	(D)	13	22
1793	Glass and glazing work	28	187	3 583	18 337	18 209	9 236	9 103	128	22	21	27
1794	Excavation work	21	200	4 322	13 511	10 792	4 715	6 277	2 719	1 044	20	18
1795	Wrecking and demolition work	*6	*57	*1 555	*3 462	*2 999	*2 053	*1 018	*463	*61	57	59
1796	Installing building equipment, n.e.c. ..	12	210	6 757	16 849	14 650	11 877	5 573	2 199	438	10	13
1799	Special trade contractors, n.e.c.	174	1 486	25 440	83 076	77 445	47 664	30 446	5 631	1 755	12	11

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

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South Carolina

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for South Carolina. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 26,699 establishments in this State operating in the construction industries. These establishments accounted for \$6.8 billion in total dollar value of business done.

Most of the 26,699 construction establishments were small. Of the total, 18,255 were nonemployers, and over half of the employer establishments had less than 5 employees. The 3,362 construction establishments with 5 employees or more, while representing only 13 percent of all establishments, accounted for more than 77 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$6.3 billion in total dollar value of business done. Of this amount, \$6.2 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.6 billion, leaving net value of construction work of \$4.6 billion. In addition, these establishments paid out \$2.4 billion for the cost of

materials, fuels, power, rental of equipment and buildings, and the cost of selected purchased services. Value added for 1992 was \$2.5 billion. (See Introduction and appendixes for explanation of terms.)

There were 8,444 establishments with total employment averaging 69,688 during the year. Total payroll for 1992 was \$1.4 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 18,255 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$532 million. Most of these establishments, about 83 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992
1987

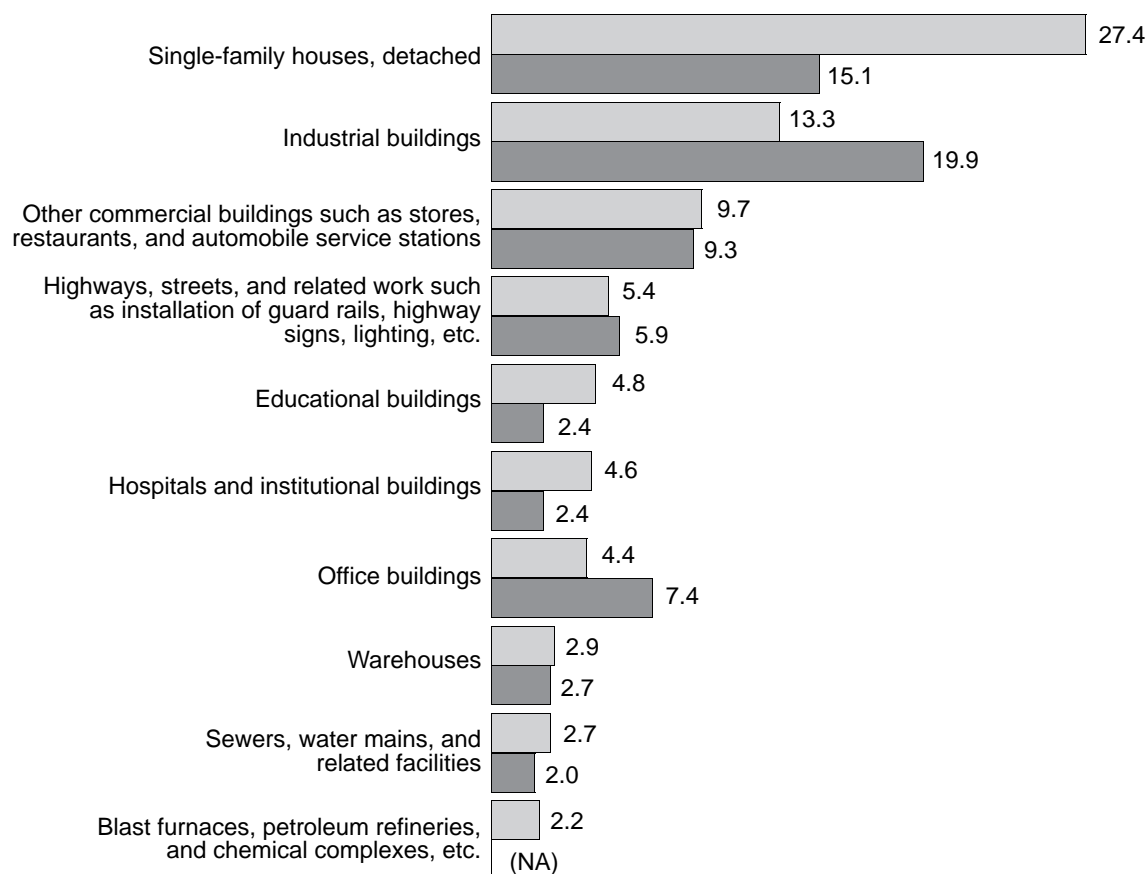


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992
1987

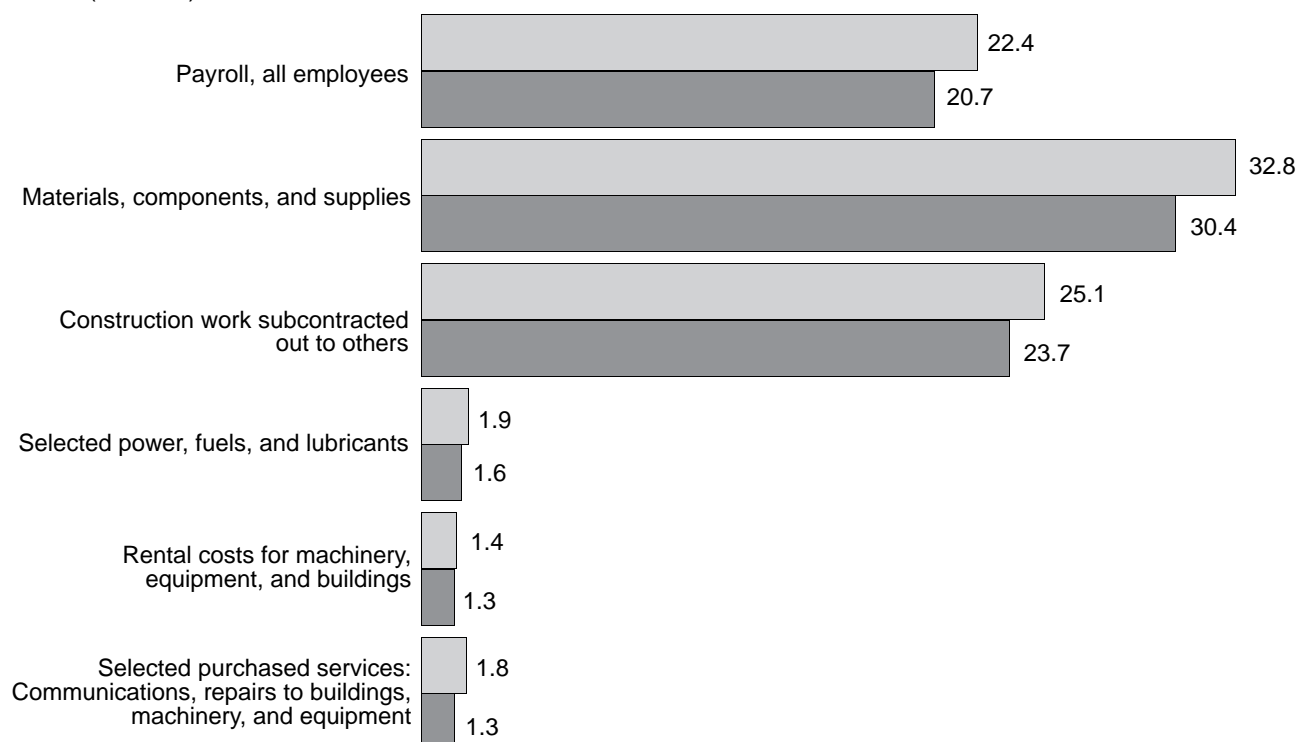


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	26 699	22 028	69 688	6 836 959	18 255	17 835	531 949	8 444	4 193	69 688	6 305 010	1	1
15	Building construction—General contractors and operative builders ----	5 462	3 526	18 024	3 033 566	2 867	2 514	225 309	2 595	(S)	18 024	2 808 257	2	2
16	Heavy construction other than building construction—contractors -----	898	481	12 271	1 094 968	310	299	8 377	588	182	12 271	1 086 591	2	2
17	Special trade contractors -----	20 339	18 021	39 393	2 708 424	15 078	15 022	298 263	5 261	2 999	39 393	2 410 161	1	2
1711	Plumbing, heating, and air-conditioning --	2 606	2 025	9 811	729 869	1 461	1 447	36 410	1 145	578	9 811	693 459	2	2
1731	Electrical work -----	1 867	1 421	7 662	508 174	1 201	1 180	22 434	666	241	7 662	485 740	2	2
	1987													
15, 16, 17	Construction industries² -----	25 455	19 216	95 354	9 815 592	17 679	17 379	1 066 463	7 776	1 837	95 354	8 749 129	1	1
15	Building construction—General contractors and operative builders ----	5 991	3 731	23 356	3 844 713	3 610	3 277	394 383	2 381	454	23 356	3 450 330	2	2
16	Heavy construction other than building construction—contractors -----	818	310	29 911	3 084 442	241	247	38 544	577	63	29 911	3 045 898	1	1
17	Special trade contractors -----	17 819	14 456	41 722	2 544 013	13 119	13 167	385 774	4 700	1 289	41 722	2 158 239	1	1
1711	Plumbing, heating, and air-conditioning --	2 416	1 664	10 514	738 175	1 356	1 360	60 123	1 060	304	10 514	678 052	2	2
1731	Electrical work -----	1 654	1 100	9 542	487 093	1 009	1 001	27 865	645	99	9 542	459 228	2	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	8 444	69 688	53 984	1 414 933	1 017 277	6 217 724	4 632 778	2 537 367
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	1 696	6 620	4 936	104 281	70 248	777 883	533 410	240 583
1522	Other residential buildings -----	72	422	294	9 441	5 369	(S)	30 405	16 531
1531	Operative builders -----	293	1 051	395	29 003	6 993	483 247	327 754	148 379
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	159	4 227	3 359	96 151	66 299	497 802	212 004	106 806
1542	Nonresidential buildings, n.e.c. -----	375	5 703	4 226	133 538	83 450	938 151	456 084	227 919
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	121	3 169	2 590	66 235	47 672	369 917	272 789	134 997
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	13	440	364	10 917	7 332	49 741	40 952	(D)
1623	Water, sewer, and utility lines -----	187	2 788	2 347	58 300	44 983	211 453	183 697	109 676
1629	Heavy construction, n.e.c. -----	266	5 875	3 624	167 001	132 155	440 689	375 259	224 430
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	1 145	9 811	7 475	204 251	144 479	687 125	627 204	334 437
1721	Painting and paper hanging -----	475	2 169	1 824	32 070	25 412	92 974	83 960	59 892
1731	Electrical work -----	666	7 662	6 355	177 785	137 048	482 458	466 286	290 165
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	447	2 657	2 429	31 177	27 356	80 939	(D)	51 449
1742	Plastering, drywall, and insulation work -----	228	2 809	2 294	53 732	40 602	172 100	158 331	91 492
1743	Terrazzo, tile, marble, and mosaic work -----	88	367	313	6 185	4 854	18 988	18 377	11 325
175	Carpentry and floor work:								
1751	Carpentry -----	574	2 233	1 813	35 112	26 725	152 582	127 586	71 202
1752	Floor laying and other floor work -----	153	472	354	6 210	4 410	28 329	26 632	14 578
1761	Roofing, siding, and sheet metal work -----	366	2 736	2 227	41 492	30 341	163 418	155 922	84 838
1771	Concrete work -----	294	2 203	1 889	32 902	25 015	119 740	110 839	61 304
1781	Water well drilling -----	55	249	184	4 802	3 555	20 185	19 721	12 551
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	60	714	587	15 670	12 286	38 458	33 947	27 601
1793	Glass and glazing work -----	46	403	259	8 430	5 100	25 001	24 634	11 898
1794	Excavation work -----	218	1 168	938	21 397	15 181	91 521	81 290	53 581
1795	Wrecking and demolition work -----	6	41	29	645	339	2 386	(D)	(D)
1796	Installing building equipment, n.e.c. -----	51	1 209	949	25 780	20 211	58 007	55 718	43 600
1799	Special trade contractors, n.e.c. -----	389	2 491	1 931	42 428	29 861	144 868	133 205	86 304

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
2 182 697	1 584 946	1 644 893	86 122	103 110	988 460	95 354	7 870 379	3 787 970	1	1	5	15, 16, 17
												15
306 756 14 052	244 473 (S)	29 686 (S)	5 085 491	8 003 (S)	66 083 *3 715	6 838 1 300	642 020 199 197	222 500 36 859	5 20	6 22	32 (S)	152 1521 1522
186 378	155 492	931	966	3 505	(S)	1 924	328 818	53 427	11	10	35	1531
112 501 241 165	285 798 482 067	27 557 21 456	6 506 8 675	2 922 5 448	37 063 65 792	6 181 7 113	1 272 287 882 236	443 024 248 366	5 3	6 3	25 14	154 1541 1542
												16
144 740	97 128	79 781	7 769	16 440	136 191	4 786	481 091	195 099	4	3	4	1611
21 205 77 234 155 161	8 789 27 756 65 431	23 931 66 539 112 131	1 513 5 336 7 911	1 030 6 949 20 252	13 086 86 896 130 948	825 3 170 21 130	102 591 184 473 1 596 464	31 931 114 204 1 213 412	4 5 3	4 5 3	25 20 18	162 1622 1623 1629
												17
299 102	59 920	333 861	12 298	10 112	99 455	10 514	669 171	320 578	2	2	14	1711
24 601	9 014	46 918	1 806	1 686	11 604	2 790	96 043	61 875	8	7	24	1721
179 403	16 172	281 505	8 296	5 272	76 199	9 542	455 758	281 256	2	2	13	1731
(D) 69 816 7 715	(D) 13 769 612	(S) (S) 14 051	1 208 (S) 264	(D) 1 063 173	11 531 14 782 2 635	3 241 2 327 604	94 081 132 538 28 996	62 445 72 098 17 436	6 5 10	(D) 9 13	(D) 24 (Z)	174 1741 1742 1743
57 257 (D)	(S) 1 697	80 817 9 224	(S) 194	852 289	9 062 4 782	1 878 404	82 365 21 529	48 313 11 325	8 14	9 17	31 16	175 1751 1752
71 435	7 495	59 645	3 037	2 235	22 916	2 593	126 373	66 796	6	9	21	1761
53 043	8 901	66 898	2 143	4 057	55 860	2 201	95 921	54 817	9	8	14	1771
7 262	*464	5 109	219	1 010	7 788	294	19 316	11 942	17	13	16	1781
8 182 15 713 28 585 571 (D) 51 455	4 511 367 10 231 (D) 2 288 11 663	28 451 17 411 52 614 809 14 079 35 880	1 769 442 2 949 78 916 3 160	1 050 (S) 4 333 (D) 1 305 2 976	10 093 2 760 62 908 (D) 12 970 (D)	648 585 930 *55 677 2 439	34 924 37 242 64 769 1 757 37 322 123 568	23 962 19 173 48 470 1 545 27 610 72 845	11 6 8 (Z) 5 7	9 7 8 (D) 5 11	31 (S) 21 (D) 4 31	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	8 444	7 776	6 028	6 478	1	1	2	3
Proprietors and working partners	4 193	1 837	2 308	4 299	2	6	4	5
All employees**	69 688	95 354	99 580	84 877	1	1	1	1
Construction workers:								
March	52 022	76 723	81 326	73 720	1	1	1	1
May	54 367	78 264	83 909	77 721	1	1	1	1
August	55 276	79 737	79 538	79 114	1	1	1	1
November	54 270	76 205	77 943	75 943	1	1	1	1
Average	53 984	77 732	81 183	76 654	1	1	1	1
Other employees:								
March	16 214	17 826	18 188	7 950	1	1	1	2
May	15 562	17 163	(NA)	(NA)	1	1	(NA)	(NA)
August	15 412	17 683	(NA)	(NA)	1	1	(NA)	(NA)
November	15 627	17 815	(NA)	(NA)	1	1	(NA)	(NA)
Average	15 704	17 622	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	1 414 933	1 812 753	1 917 734	933 801	1	1	(Z)	1
Payroll, construction workers	1 017 277	1 315 337	1 662 937	809 610	1	1	(Z)	1
Payroll, other employees	397 657	497 416	254 797	124 191	1	1	1	2
First-quarter payroll, all employees	323 981	425 809	211 740	209 276	1	1	1	1
Fringe benefits, all employees	257 694	516 363	339 401	125 305	1	(Z)	1	1
Legally required expenditures	199 074	320 952	285 848	86 191	1	1	(Z)	1
Voluntary expenditures	58 620	195 410	53 553	39 114	2	(Z)	1	1
Dollar value of business done	6 305 010	8 749 129	5 843 469	3 104 040	1	1	1	1
Value of construction work	6 217 724	7 870 379	5 679 199	3 025 605	1	1	1	1
Value of construction work subcontracted in from others	1 644 893	1 308 331	1 127 203	529 041	3	3	1	2
Other business receipts	87 286	791 499	124 405	78 435	6	1	2	4
Net value of construction†	4 632 778	5 798 488	3 926 774	2 397 898	1	1	1	1
Value added††	2 537 367	3 787 970	2 312 738	1 281 897	1	1	1	1
Selected costs	3 767 643	4 873 908	3 490 866	1 798 147	1	1	1	1
Materials, components, and supplies	2 065 069	2 661 780	1 617 335	1 125 522	2	1	1	1
Construction work subcontracted out to others	1 584 946	2 071 890	1 752 425	627 707	2	1	1	1
Selected power, fuels, and lubricants	117 628	140 237	121 106	44 917	2	1	1	2
Electricity	16 997	18 476	16 504	6 154	3	3	1	2
Natural gas	4 699	3 565	2 896	1 267	4	2	2	9
Gasoline and diesel fuel	89 508	108 266	93 174	32 628	2	1	2	2
On highway use	65 904	76 940	(NA)	(NA)	3	1	(NA)	(NA)
Off highway use	23 604	31 325	(NA)	(NA)	4	2	(NA)	(NA)
Other, including lubricating oils and greases	6 424	9 928	8 531	4 872	6	2	2	4
Rental cost for machinery, equipment, and buildings	86 122	114 973	42 267	32 334	3	2	2	2
For machinery and equipment	59 201	77 787	31 331	27 458	4	3	3	2
For buildings	26 921	36 431	10 936	4 876	4	2	3	3
Selected purchased services	115 322	114 973	65 111	44 338	3	2	2	3
Communication services	37 546	31 123	19 702	10 906	7	2	2	2
Repairs to buildings and other structures	5 410	5 839	3 310	2 083	11	4	4	14
Repairs to machinery and equipment	72 367	78 010	42 098	31 349	4	2	2	3
Ownership of construction projects:								
Value of construction work	6 217 724	7 870 379	5 679 199	3 025 605	1	1	1	1
Government owned	1 274 489	1 096 415	644 669	409 279	3	3	4	1
Federal	274 600	318 263	(NA)	(NA)	5	6	(NA)	(NA)
State and local	999 889	778 152	(NA)	(NA)	3	3	(NA)	(NA)
Privately owned	4 943 235	6 773 964	5 034 529	2 616 326	2	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	944 892	733 964	3	3
Capital expenditures, other than land -----	103 110	120 952	5	3
New -----	72 277	97 276	5	4
Used -----	30 833	23 676	13	7
Retirements and disposition of depreciable assets -----	59 542	36 338	7	5
End-of-year gross book value of depreciable assets -----	988 460	818 578	3	3
Depreciation charges during year -----	119 386	103 355	4	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	140 050	167 569	16	8
Capital expenditures, other than land -----	11 357	13 855	22	10
New buildings and other structures -----	7 748	10 331	27	11
Used buildings and other structures -----	3 609	3 523	38	26
Retirements and disposition of depreciable assets -----	* 4 162	7 508	57	10
End-of-year gross book value of depreciable assets -----	147 245	173 915	15	8
Depreciation charges during year -----	14 094	17 103	19	8
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	804 842	566 395	3	3
Capital expenditures, other than land -----	91 753	107 097	4	4
New machinery and equipment, including automobiles and trucks -----	64 529	86 945	4	4
New automobiles and trucks, intended primarily for highway use -----	30 267	40 830	6	5
Used machinery and equipment, including automobiles and trucks -----	27 224	20 152	11	7
Retirements and disposition of depreciable assets -----	55 380	28 829	6	6
End-of-year gross book value of depreciable assets -----	841 215	644 662	3	3
Depreciation charges during year -----	105 292	86 251	3	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	8 444	1
Value of construction work	6 217 724	1
Establishments with inventories:		
Number	2 280	3
Value of construction work	2 227 133	2
Inventories ¹ :		
End of 1992, materials and supplies	69 085	14
End of 1991, materials and supplies	65 480	11
Establishments with no inventories:		
Number	2 896	3
Value of construction work	2 550 005	2
Establishments not reporting:		
Number	3 267	2
Value of construction work	1 440 587	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	8 444	(S)	1 824	919	441	122	40	11	2	3
All employees** -----	69 688	9 631	11 484	12 077	12 978	8 305	6 173	4 944	(D)	4 097
Payroll, all employees -----	1 414 933	137 006	185 036	218 697	283 934	186 701	147 016	134 180	(D)	122 363
Dollar value of business done -----	6 305 010	(S)	868 384	956 695	1 274 848	834 746	527 707	473 766	(D)	346 089
Value of construction work -----	6 217 724	(S)	857 369	940 676	1 255 481	821 787	514 585	471 279	(D)	346 089
Net value of construction work† -----	4 632 778	(S)	698 028	751 673	949 774	562 070	385 308	239 872	280 995	(D)
Value added†† -----	2 537 367	(S)	380 483	434 526	517 744	320 302	214 045	125 204	177 758	(D)
Cost of materials, components, supplies, and fuels -----	2 182 697	410 070	328 560	333 166	451 397	254 727	184 385	126 642	(D)	93 750
Cost of construction work subcontracted out to others -----	1 584 946	(S)	159 342	189 003	305 706	259 717	129 277	296 501	(D)	(D)
Rental cost for machinery, equipment, and buildings -----	86 122	7 591	10 734	12 540	19 088	11 075	11 636	8 181	(D)	5 277
Capital expenditures, other than land -----	103 110	20 423	17 414	14 176	13 857	11 632	16 812	7 228	(D)	1 569
End-of-year gross book value of depreciable assets -----	988 460	161 929	139 735	149 451	193 598	164 499	108 098	59 193	(D)	11 957
1987										
All employees** -----	95 354	(S)	(S)	12 566	14 676	10 854	7 279	4 840	5 009	20 334
Value of construction work -----	7 870 379	(S)	(S)	2 003 336	(D)	1 631 398	(D)	2 858 756	(D)	(D)
Value added†† -----	3 787 970	(S)	(S)	379 414	887 851	(D)	393 736	(D)	1 548 933	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	4	5	5	3	1	(Z)	(Z)	(D)	(Z)
Net value of construction work† -----	1	(S)	6	5	2	(Z)	(Z)	(Z)	(Z)	(D)
Capital expenditures, other than land -----	5	16	22	15	5	(Z)	(Z)	(Z)	(D)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	8 444	(S)	(S)	(S)	2 506	1 251	949	802	259	104	76
All employees** -----	69 688	(S)	(S)	(S)	8 801	7 471	8 579	12 016	7 984	6 074	15 006
Payroll, all employees -----	1 414 933	(S)	(S)	(S)	109 034	116 390	155 799	247 423	183 112	155 234	414 046
Dollar value of business done -----	6 305 010	(S)	(S)	(S)	395 236	440 745	664 812	1 220 555	902 407	716 406	1 844 576
Value of construction work -----	6 217 724	(S)	(S)	(S)	390 878	437 109	649 861	1 200 595	892 579	709 338	1 818 369
Net value of construction work† -----	4 632 778	(S)	(S)	(S)	352 520	382 616	543 785	932 138	697 321	499 455	1 113 495
Value added†† -----	2 537 367	(S)	(S)	(S)	209 311	217 817	300 631	475 840	383 220	268 387	614 120
Cost of materials, components, supplies, and fuels -----	2 182 697	(S)	(S)	(S)	147 567	168 434	258 105	476 258	323 928	238 136	525 582
Cost of construction work subcontracted out to others -----	1 584 946	(S)	(S)	(S)	(S)	(S)	106 076	268 457	195 258	209 883	704 874
Rental cost for machinery, equipment, and buildings -----	86 122	(S)	(S)	(S)	5 685	5 886	10 261	14 380	10 482	10 446	28 034
Capital expenditures, other than land -----	103 110	(S)	(S)	(S)	11 843	8 654	15 813	17 469	9 168	10 380	27 098
End-of-year gross book value of depreciable assets -----	988 460	(S)	(S)	(S)	82 712	65 978	165 921	187 040	137 409	115 318	214 148
1987											
All employees** -----	95 354	(S)	(S)	(S)	(S)	9 468	8 851	11 085	10 284	7 944	35 502
Value of construction work -----	7 870 379	(S)	(S)	(S)	(S)	473 621	573 035	1 739 256	(D)	4 652 789	(D)
Value added†† -----	3 787 970	(S)	(S)	(S)	(S)	229 001	263 988	408 877	652 820	(D)	1 999 215
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	(S)	6	6	5	4	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	(S)	5	6	6	5	5	3	(Z)
Capital expenditures, other than land -----	5	(S)	(S)	(S)	15	22	26	12	9	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

SC-10 SOUTH CAROLINA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	6 217 724	3 999 334	1 210 624	760 624	1	2	2	2
Building construction	4 627 343	3 178 882	955 596	492 864	2	2	2	3
Single-family houses	1 778 100	1 422 226	218 943	136 932	4	4	6	5
Single-family houses, detached	1 702 068	1 366 802	208 790	126 475	4	4	6	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	76 032	55 423	(S)	10 457	12	15	(S)	11
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	114 038	(S)	21 754	13 320	17	(S)	16	14
Other residential buildings, including hotels, motels, and tourist cabins	41 697	19 577	13 886	8 234	9	10	17	13
Office buildings	273 854	144 139	89 967	39 749	4	6	7	6
Other commercial buildings such as stores, restaurants, and automobile service stations	602 213	374 145	153 132	74 936	3	3	5	9
Industrial buildings and warehouses	1 008 034	555 149	280 251	172 635	2	2	3	4
Industrial buildings	827 092	413 571	253 656	159 865	2	3	4	4
Warehouses	180 942	141 578	26 594	12 770	4	4	4	24
Religious buildings	123 573	90 211	25 591	7 771	5	7	6	12
Educational buildings	301 233	212 973	71 814	16 445	3	3	7	10
Hospitals and institutional buildings	287 636	207 898	65 617	14 121	4	4	9	4
Amusement, social, and recreational buildings, indoors	43 711	33 705	7 584	2 422	7	8	4	6
Other nonresidential buildings	53 252	39 897	(S)	6 298	6	7	(S)	13
Nonbuilding construction	1 343 239	820 452	255 028	267 760	2	2	3	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	335 720	193 413	80 949	61 359	3	4	2	5
Outdoor swimming pools	34 562	23 894	3 650	7 018	22	24	27	36
Private driveways and parking areas	59 208	31 449	10 906	16 854	10	11	13	20
Bridges, tunnels, and elevated highways	81 786	62 464	11 111	8 211	3	3	3	10
Conservation and development construction	56 801	49 447	2 181	*5 173	15	17	11	41
Power and communication transmission lines, towers, and related facilities	122 358	80 891	15 973	25 494	4	3	9	8
Sewers, water mains, and related facilities	169 035	132 764	17 010	19 261	6	8	6	10
Sewers, sewer lines, septic systems, and related facilities	84 398	66 970	8 666	8 761	9	10	7	13
Water mains and related facilities	84 638	65 794	8 344	10 500	7	8	8	14
Blast furnaces, petroleum refineries, chemical complexes, etc.	137 679	64 474	19 684	53 521	(Z)	(Z)	1	(Z)
Power plants	100 051	52 503	6 975	40 572	(Z)	(Z)	(Z)	(Z)
Sewage treatment and water treatment plants	73 196	31 903	38 962	*2 331	8	2	15	43
Other nonbuilding construction	172 843	97 250	47 626	27 966	9	11	9	8
Construction work, n.s.k.	247 142	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
1987								
Value of construction work	7 870 379	5 524 998	1 158 119	751 857	1	1	2	2
Building construction	5 349 992	4 085 014	842 382	422 595	1	1	2	2
Single-family houses	1 319 201	1 012 361	212 170	94 670	4	5	6	6
Single-family houses, detached	1 185 410	905 401	194 597	85 411	4	5	6	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	133 790	106 959	17 572	9 259	9	11	25	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	235 890	200 478	*22 876	12 535	8	8	40	13
Other residential buildings, including hotels, motels, and tourist cabins	161 967	141 259	12 673	8 034	4	4	15	7
Office buildings	580 081	443 199	81 074	55 808	2	2	9	3
Other commercial buildings such as stores, restaurants, and automobile service stations	731 584	532 233	139 776	59 574	2	2	4	4
Industrial buildings and warehouses	1 780 468	1 417 334	219 084	144 049	1	1	1	2
Industrial buildings	1 567 046	1 249 536	178 057	139 451	1	1	2	2
Warehouses	213 422	167 797	41 026	4 597	3	4	3	14
Religious buildings	71 997	48 957	18 442	4 597	8	8	11	12
Educational buildings	192 314	125 819	52 544	13 949	4	4	8	23
Hospitals and institutional buildings	187 918	114 262	61 509	12 147	4	4	7	8
Amusement, social, and recreational buildings, indoors	32 101	24 447	5 711	1 942	7	7	23	11
Other nonresidential buildings	56 471	24 665	16 523	15 290	11	12	24	9
Nonbuilding construction	2 084 983	1 439 984	315 736	329 262	1	1	3	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	467 346	271 713	105 510	90 121	4	5	7	3
Outdoor swimming pools	37 405	29 678	2 696	5 031	22	23	28	28
Private driveways and parking areas	36 123	23 515	8 707	3 900	19	18	29	35
Bridges, tunnels, and elevated highways	101 075	85 971	14 090	1 014	2	2	(Z)	(Z)
Power and communication transmission lines, towers, and related facilities	227 306	153 645	40 007	33 653	1	1	(Z)	1
Sewers, water mains, and related facilities	158 447	136 564	9 507	12 374	5	6	17	8
Sewers, sewer lines, septic systems, and related facilities	94 697	62 054	6 523	6 120	6	6	24	14
Water mains and related facilities	63 749	54 510	2 983	6 254	7	8	8	7
Power plants	83 566	22 815	(D)	(D)	1	(Z)	(D)	(D)
Sewage treatment and water treatment plants	238 197	193 568	(D)	(D)	1	1	(D)	(D)
Other nonbuilding construction	735 518	522 515	99 485	113 524	16	17	24	27
Construction work, n.s.k.	435 403	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	8 444	53 984	52 022	54 367	55 276	54 270	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	1 696	4 936	4 731	5 067	5 155	4 792	4	6	6	6	6	6
1522	Other residential buildings -----	72	294	263	298	310	306	25	19	19	20	19	19
1531	Operative builders -----	293	395	384	408	429	359	12	19	18	18	19	21
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	159	3 359	3 218	3 277	3 502	3 437	14	4	4	4	5	5
1542	Nonresidential buildings, n.e.c. ---	375	4 226	4 264	4 258	4 322	4 058	8	3	3	3	4	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	121	2 590	2 301	2 611	2 797	2 652	13	4	5	4	4	4
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	13	364	402	369	368	318	21	4	4	4	4	4
1623	Water, sewer, and utility lines -----	187	2 347	2 415	2 309	2 380	2 282	12	5	5	5	6	6
1629	Heavy construction, n.e.c. -----	266	3 624	3 416	3 280	3 423	4 379	11	4	4	4	4	4
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 145	7 475	7 168	7 754	7 636	7 342	2	2	2	4	2	2
1721	Painting and paper hanging -----	475	1 824	1 768	1 863	1 929	1 737	3	8	9	8	8	8
1731	Electrical work -----	666	6 355	6 613	6 529	6 384	5 896	3	2	2	2	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	447	2 429	2 355	2 469	2 466	2 426	3	6	7	7	7	7
1742	Plastering, drywall, and insulation work -----	228	2 294	2 054	2 298	2 267	2 557	6	4	5	4	4	10
1743	Terrazzo, tile, marble, and mosaic work -----	88	313	300	407	283	262	19	11	11	10	11	11
175	Carpentry and floor work:												
1751	Carpentry -----	574	1 813	1 726	1 905	1 892	1 729	5	8	9	8	8	9
1752	Floor laying and other floor work --	153	354	352	345	375	344	7	16	16	15	15	19
1761	Roofing, siding, and sheet metal work -----	366	2 227	2 110	2 212	2 333	2 254	6	6	6	6	6	7
1771	Concrete work -----	294	1 889	1 711	1 981	1 980	1 886	8	9	10	9	9	10
1781	Water well drilling -----	55	184	186	187	187	174	17	18	18	18	18	19
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	60	587	640	550	557	600	20	10	10	10	10	9
1793	Glass and glazing work -----	46	259	257	257	262	259	19	6	6	6	6	6
1794	Excavation work -----	218	938	832	984	1 003	932	12	8	7	7	7	7
1795	Wrecking and demolition work -----	6	29	24	33	30	28	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1796	Installing building equipment, n.e.c. -----	51	949	780	843	1 053	1 120	15	4	5	5	3	3
1799	Special trade contractors, n.e.c. ---	389	1 931	1 751	1 876	1 953	2 141	9	7	8	8	9	6

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.3	20.3	115.2	.228	.351	.255	.265	.014
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.9	15.8	157.6	.134	.394	.314	.038	.007
1522	Other residential buildings -----	5.9	22.4	(S)	(S)	(S)	(S)	(S)	(S)
1531	Operative builders -----	3.6	27.6	1 223.4	.060	.386	.322	.002	.002
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	26.5	22.7	148.2	.193	.226	.574	.055	.013
1542	Nonresidential buildings, n.e.c. -----	15.2	23.4	222.0	.142	.257	.514	.023	.009
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	26.2	20.9	142.8	.179	.391	.263	.216	.021
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	33.0	24.8	136.7	.219	.426	.177	.481	.030
1623	Water, sewer, and utility lines -----	14.9	20.9	90.1	.276	.365	.131	.315	.025
1629	Heavy construction, n.e.c. -----	22.1	28.4	121.6	.379	.352	.148	.254	.018
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.6	20.8	91.9	.297	.435	.087	.486	.018
1721	Painting and paper hanging -----	4.6	14.8	51.0	.345	.265	.097	.505	.019
1731	Electrical work -----	11.5	23.2	75.9	.368	.372	.034	.583	.017
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.9	11.7	33.3	.385	(D)	(D)	(S)	.015
1742	Plastering, drywall, and insulation work -----	12.3	19.1	75.0	.312	.406	.080	(S)	(S)
1743	Terrazzo, tile, marble, and mosaic work -----	4.2	16.9	60.7	.326	.406	.032	.740	.014
175	Carpentry and floor work:								
1751	Carpentry -----	3.9	15.7	84.2	.230	.375	(S)	.530	(S)
1752	Floor laying and other floor work -----	3.1	13.2	80.0	.219	(D)	.060	.326	.007
1761	Roofing, siding, and sheet metal work -----	7.5	15.2	73.4	.254	.437	.046	.365	.019
1771	Concrete work -----	7.5	14.9	63.4	.275	.443	.074	.559	.018
1781	Water well drilling -----	4.5	19.3	109.7	.238	.360	*.023	.253	.011
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	12.0	21.9	65.5	.407	.213	.117	.740	*.046
1793	Glass and glazing work -----	8.7	20.9	96.5	.337	.629	.015	.696	.018
1794	Excavation work -----	5.4	18.3	97.6	.234	.312	.112	.575	.032
1795	Wrecking and demolition work -----	6.8	15.7	82.3	.270	.239	(D)	.339	.033
1796	Installing building equipment, n.e.c. -----	23.7	21.3	61.1	.444	(D)	.039	.243	.016
1799	Special trade contractors, n.e.c. -----	6.4	17.0	75.0	.293	.355	.081	.248	.022

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHARLOTTE–GASTONIA–ROCK HILL, NC–SC MSA											
15,16, 17	Construction industries	3 507	35 793	820 669	3 891 328	2 727 292	1 524 019	1 258 910	1 164 036	62 675	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	471	1 819	31 844	270 911	196 167	84 624	113 403	74 745	1 816	7	8
1522	Other residential buildings	(S)	125	2 019	13 169	7 479	4 216	3 416	5 690	(D)	(Z)	(Z)
1531	Operative builders	156	956	32 107	340 774	209 948	103 767	116 121	130 826	975	7	7
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	48	1 109	26 214	135 442	(D)	51 713	37 915	(D)	*2 117	10	(D)
1542	Nonresidential buildings, n.e.c.	204	4 278	105 054	787 959	275 089	132 517	142 894	512 869	2 295	4	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	49	2 263	54 637	253 903	205 254	82 978	133 932	48 649	15 114	2	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	87	2 244	58 891	214 670	171 487	108 830	67 291	43 183	7 818	3	3
1629	Heavy construction, n.e.c.	79	1 788	60 973	(D)	(D)	194 106	58 399	(D)	12 937	5	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	521	5 868	143 046	483 839	437 903	221 650	222 824	45 936	4 834	2	3
1721	Painting and paper hanging	256	1 244	21 691	56 785	52 393	38 889	13 643	4 392	(S)	7	6
1731	Electrical work	340	3 222	76 449	206 933	200 949	119 763	83 296	5 983	2 523	4	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	177	1 364	26 554	66 110	63 200	41 265	22 136	2 910	(S)	8	7
1742	Plastering, drywall, and insulation work	131	1 929	39 528	126 022	110 633	68 181	47 105	15 389	2 321	5	6
1743	Terrazzo, tile, marble, and mosaic work	34	239	5 564	16 520	14 943	8 301	6 735	*1 577	(D)	6	6
175	Carpentry and floor work:											
1751	Carpentry	243	989	16 670	77 102	62 836	40 663	23 094	14 266	(S)	13	13
1752	Floor laying and other floor work	89	(S)	(S)	(S)	(S)	12 727	(S)	(S)	(S)	(S)	(S)
1761	Roofing, siding, and sheet metal work	141	1 283	23 377	74 141	70 622	37 590	34 495	3 519	488	7	8
1771	Concrete work	148	1 182	18 219	66 468	62 930	34 742	28 188	3 538	(S)	9	10
1781	Water well drilling	13	63	(D)	5 875	5 705	(D)	(D)	170	*85	11	12
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	19	304	6 441	17 434	16 768	13 365	3 403	*667	127	26	21
1793	Glass and glazing work	32	375	9 012	30 551	(D)	14 257	14 344	(D)	*104	9	(D)
1794	Excavation work	61	485	10 990	32 898	27 632	21 825	6 880	5 266	*1 700	8	5
1795	Wrecking and demolition work	(S)	(D)	(S)	(D)	(D)	(S)	(S)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c.	31	1 017	19 068	72 155	(D)	42 191	24 926	(D)	212	(Z)	(D)
1799	Special trade contractors, n.e.c.	159	1 198	22 510	73 900	67 693	39 103	28 997	6 207	1 849	7	8
	GREENVILLE–SPARTANBURG–ANDERSON, SC MSA											
15,16, 17	Construction industries	2 152	22 186	496 148	1 956 687	1 434 867	806 058	654 458	521 821	30 887	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	387	1 391	22 647	178 442	119 518	44 797	78 546	58 924	1 831	11	13
1522	Other residential buildings	*14	136	3 259	19 279	(S)	3 812	(S)	10 926	60	36	(S)
1531	Operative builders	94	233	7 473	115 461	80 099	26 257	55 643	35 362	1 488	23	22
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	43	2 390	62 983	331 804	126 031	61 479	71 338	205 773	1 945	3	6
1542	Nonresidential buildings, n.e.c.	75	1 256	30 392	224 940	111 194	58 595	53 282	113 746	1 360	6	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	28	726	17 033	76 898	61 771	41 310	22 911	15 128	2 217	9	9
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1623	Water, sewer, and utility lines	62	427	8 734	27 760	26 500	17 340	9 160	1 260	2 111	18	17
1629	Heavy construction, n.e.c.	35	2 278	(D)	147 642	126 687	73 794	52 906	20 955	*7 222	3	4

SC-14 SOUTH CAROLINA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	GREENVILLE-SPARTANBURG-ANDERSON, SC MSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	303	3 362	75 513	238 639	218 567	128 749	92 830	20 072	3 171	4	4
1721	Painting and paper hanging-----	(S)	655	10 408	31 953	27 029	19 311	7 734	*4 925	479	13	14
1731	Electrical work -----	189	3 456	83 120	219 717	211 827	134 931	77 869	7 890	1 258	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	149	867	12 064	36 019	32 162	21 804	(S)	3 858	517	11	13
1742	Plastering, drywall, and insulation work -----	52	752	14 094	49 088	44 625	29 847	15 834	*4 463	*408	13	31
1743	Terrazzo, tile, marble, and mosaic work -----	31	180	3 172	9 724	9 418	5 563	3 937	(S)	(D)	17	19
175	Carpentry and floor work:											
1751	Carpentry-----	(S)	(S)	(S)	44 156	37 211	(S)	18 478	*6 945	465	(S)	22
1752	Floor laying and other floor work ---	55	199	2 758	13 039	12 320	*6 696	5 671	719	(S)	27	30
1761	Roofing, siding, and sheet metal work -----	(S)	1 001	15 042	63 228	60 726	34 453	26 390	2 503	809	10	20
1771	Concrete work -----	52	314	4 841	20 990	20 012	7 838	12 255	977	(D)	6	4
1781	Water well drilling -----	4	(D)	796	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	25	180	3 456	8 061	6 818	5 211	1 926	(S)	334	30	20
1793	Glass and glazing work -----	*12	106	1 749	4 069	(D)	2 389	2 140	(D)	(D)	24	(D)
1794	Excavation work-----	38	240	4 817	24 445	21 991	14 228	7 797	2 454	*1 457	22	21
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -	19	417	12 988	27 422	26 034	21 154	4 880	1 388	881	10	10
1799	Special trade contractors, n.e.c.-----	103	902	15 017	38 814	36 879	24 802	15 520	1 935	(S)	13	14

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Virginia

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Virginia. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 50,537 establishments in this State operating in the construction industries. These establishments accounted for \$15.3 billion in total dollar value of business done.

Most of the 50,537 construction establishments were small. Of the total, 33,386 were nonemployers, and over half of the employer establishments had less than 5 employees. The 6,609 construction establishments with 5 employees or more, while representing only 13 percent of all establishments, accounted for more than 80 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$14.3 billion in total dollar value of business done. Of this amount, \$14.0 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$3.5 billion, leaving net value of construction work of \$10.5 billion. In addition, these establishments paid out \$5.1 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$6.1 billion. (See Introduction and appendixes for explanation of terms.)

There were 17,151 establishments with total employment averaging 143,644 during the year. Total payroll for 1992 was \$3.2 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 33,386 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$997 million. Most of these establishments, about 82 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

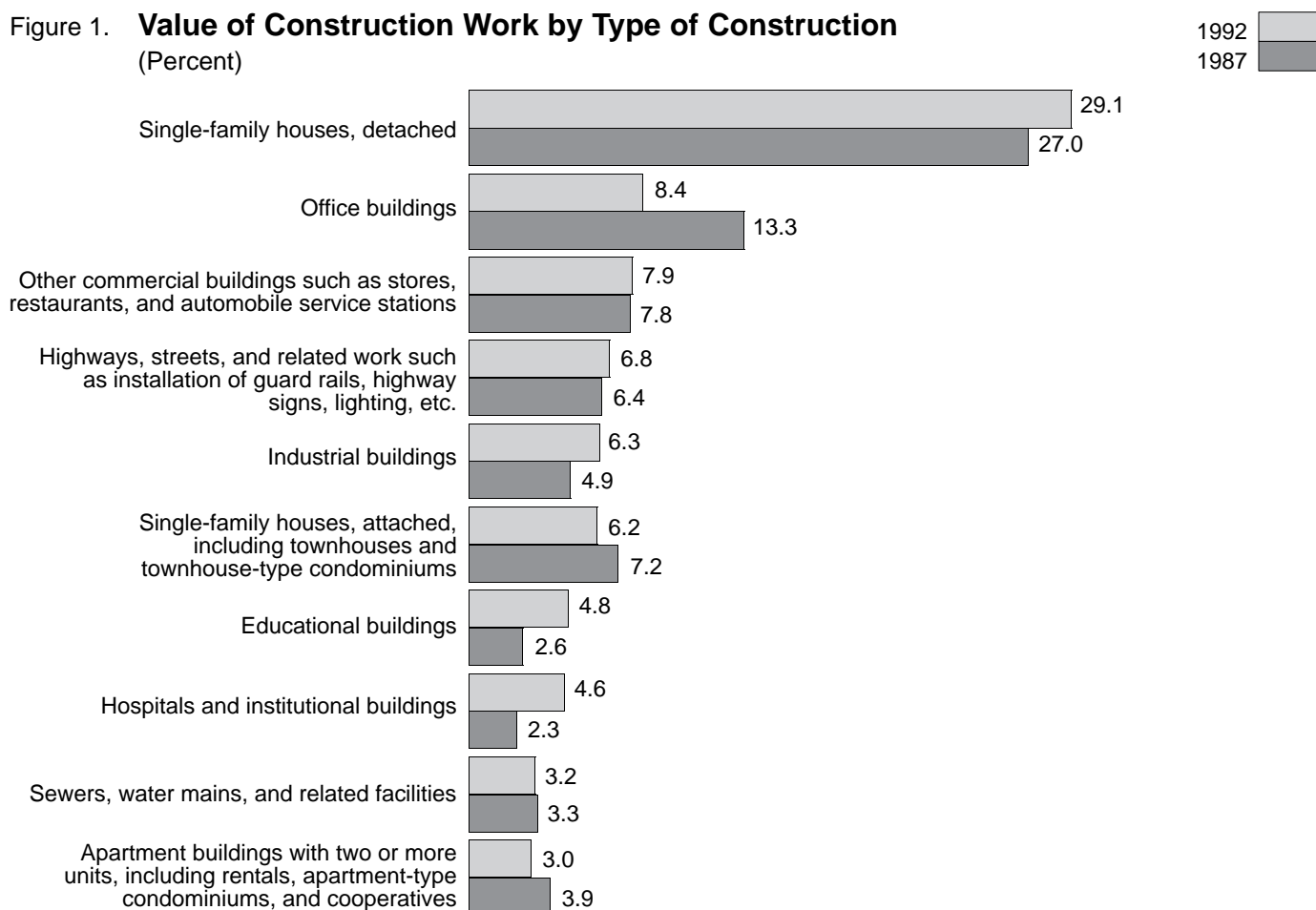


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

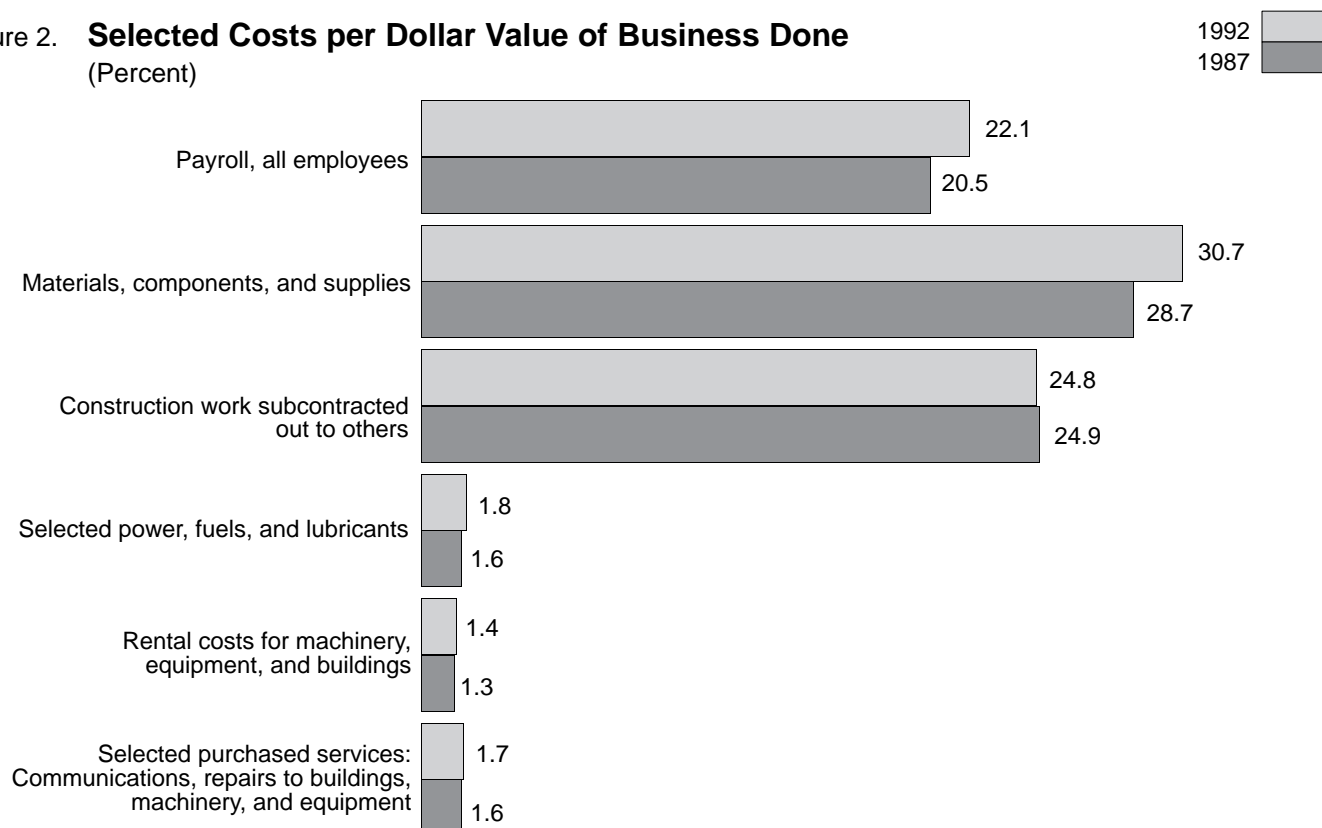


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	50 537	39 279	143 644	15 290 546	33 386	32 228	997 111	17 151	7 051	143 644	14 293 435	1	1
15	Building construction—General contractors and operative builders ----	11 176	6 956	34 010	6 842 942	5 718	4 962	424 284	5 458	1 994	34 010	6 418 658	1	2
16	Heavy construction other than building construction—contractors -----	1 576	656	25 754	2 374 023	414	387	17 035	1 162	269	25 754	2 356 988	1	1
17	Special trade contractors -----	37 786	31 667	83 881	6 073 581	27 254	26 879	555 792	10 532	4 788	83 881	5 517 789	1	1
1711	Plumbing, heating, and air-conditioning --	4 507	3 042	18 503	1 453 241	2 339	2 280	61 233	2 168	762	18 503	1 392 008	2	1
1731	Electrical work -----	3 379	2 331	13 448	1 007 015	1 966	1 904	34 798	1 413	427	13 448	972 217	2	1
	1987													
15, 16, 17	Construction industries² -----	52 115	39 214	171 298	18 295 113	35 489	34 788	2 243 446	16 626	4 426	171 298	16 051 667	1	1
15	Building construction—General contractors and operative builders ----	12 547	7 802	44 859	8 320 157	7 393	6 711	687 081	5 154	1 091	44 859	7 633 076	1	1
16	Heavy construction other than building construction—contractors -----	1 421	493	27 468	2 346 818	401	387	32 841	1 020	106	27 468	2 313 977	2	2
17	Special trade contractors -----	36 694	29 603	97 783	6 658 979	26 451	26 412	773 292	10 243	3 191	97 783	5 885 687	1	1
1711	Plumbing, heating, and air-conditioning --	4 188	2 720	21 062	1 489 037	2 234	2 208	83 600	1 954	512	21 062	1 405 437	2	1
1731	Electrical work -----	3 172	2 180	14 928	981 807	1 900	1 880	51 024	1 272	300	14 928	930 783	2	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	17 151	143 644	111 868	3 160 154	2 183 285	14 033 074	10 495 150	6 110 086
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3 654	14 307	10 597	240 756	164 293	1 403 512	1 014 818	510 060
1522	Other residential buildings -----	167	1 345	960	27 651	17 363	204 247	117 718	65 826
1531	Operative builders -----	800	5 671	2 691	160 738	51 793	2 177 750	1 411 931	858 173
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	141	2 218	1 601	52 503	32 429	288 409	163 327	90 114
1542	Nonresidential buildings, n.e.c. -----	696	10 469	7 361	283 974	164 774	2 215 492	846 191	381 436
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	358	8 856	7 209	205 941	149 691	905 678	722 444	412 764
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	29	987	836	25 829	19 333	126 648	91 448	49 892
1623	Water, sewer, and utility lines -----	292	8 438	7 199	203 119	156 625	636 711	558 734	381 968
1629	Heavy construction, n.e.c. -----	483	7 473	6 094	192 658	138 628	643 173	543 077	364 907
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	2 168	18 503	13 953	428 557	302 312	1 374 534	1 270 564	701 906
1721	Painting and paper hanging -----	1 156	5 554	4 640	97 665	74 945	256 904	234 934	172 663
1731	Electrical work -----	1 413	13 448	10 661	331 203	235 797	959 376	919 972	525 171
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	986	7 175	6 398	112 856	93 957	304 464	(D)	168 608
1742	Plastering, drywall, and insulation work -----	468	6 885	5 724	149 324	112 635	401 947	368 674	229 416
1743	Terrazzo, tile, marble, and mosaic work -----	194	1 133	889	20 471	13 884	66 424	63 977	34 548
175	Carpentry and floor work:								
1751	Carpentry -----	1 062	5 233	4 320	95 735	73 048	331 460	290 175	177 421
1752	Floor laying and other floor work -----	362	1 619	1 180	33 275	21 949	123 301	112 397	58 069
1761	Roofing, siding, and sheet metal work -----	766	6 755	5 434	128 846	90 042	412 490	385 392	207 054
1771	Concrete work -----	661	5 490	4 609	105 792	79 460	345 643	321 344	197 935
1781	Water well drilling -----	103	625	469	14 778	9 512	50 509	(D)	29 097
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	73	1 197	982	32 340	24 975	89 745	79 260	54 771
1793	Glass and glazing work -----	95	760	501	16 725	10 423	56 209	55 455	31 667
1794	Excavation work -----	318	2 218	1 838	45 376	34 932	178 256	148 494	97 565
1795	Wrecking and demolition work -----	14	128	103	2 661	1 889	7 267	6 711	5 295
1796	Installing building equipment, n.e.c. -----	78	2 317	1 830	60 210	46 984	185 399	175 488	130 520
1799	Special trade contractors, n.e.c. -----	614	4 840	3 791	91 172	61 613	287 527	260 071	173 240

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
4 645 426	3 537 923	3 984 035	200 477	186 642	2 320 362	171 298	15 218 417	6 624 200	1	1	3	15, 16, 17
												15
519 904	388 694	42 473	10 647	12 416	106 810	14 995	1 265 562	499 634	3	4	13	152
53 803	86 529	*8 645	1 434	*534	7 217	2 421	340 988	88 372	10	32	44	1521
638 015	765 819	17 672	8 227	14 456	153 664	10 224	2 776 228	851 474	5	5	32	1531
77 911	125 083	9 885	2 928	2 569	36 312	2 753	392 775	98 034	5	7	10	154
487 990	1 369 301	58 289	14 193	9 851	131 092	14 466	2 245 655	565 368	3	3	9	1542
												16
341 258	183 234	232 034	22 245	23 962	455 888	9 218	909 538	459 291	3	2	6	1611
41 620	35 200	18 671	5 297	1 089	26 413	2 440	278 343	84 944	7	6	14	162
179 277	77 977	138 277	20 657	27 365	332 806	9 849	677 443	412 314	2	2	6	1622
188 796	100 096	106 870	19 613	15 292	249 865	5 961	405 087	221 412	3	3	10	1623
												17
586 131	103 970	832 426	19 497	19 447	183 623	21 062	1 385 283	715 838	2	1	9	1711
63 074	21 970	135 829	3 834	3 409	23 622	6 218	248 746	174 181	4	4	23	1721
407 642	39 403	587 577	13 604	12 333	100 833	14 928	923 952	534 661	2	1	7	1731
(D)	(D)	232 884	4 069	4 688	45 062	8 902	369 628	240 392	4	(D)	15	174
146 479	33 272	329 225	6 026	4 055	33 898	8 202	513 328	298 943	3	3	14	1742
30 351	2 446	51 105	1 128	*665	5 976	1 495	73 017	39 531	10	7	46	1743
												175
113 548	41 285	224 175	5 533	3 907	32 029	5 962	289 388	151 165	5	4	16	1751
60 399	10 904	87 916	1 626	1 742	17 128	2 074	153 528	75 861	7	6	23	1752
179 244	27 099	207 523	6 281	5 700	56 194	7 039	377 384	210 561	3	3	20	1761
128 341	24 298	248 294	11 986	6 111	74 363	7 870	492 301	269 927	4	3	17	1771
23 445	(D)	4 173	509	469	32 473	753	50 279	26 400	7	(D)	32	1781
												179
26 556	10 486	74 506	2 710	1 400	31 851	1 896	150 433	89 538	7	6	17	1791
29 783	754	35 131	1 112	264	6 422	1 061	94 576	42 846	9	11	17	1793
56 198	29 762	100 768	6 451	7 246	86 676	3 545	276 291	184 398	6	6	18	1794
(D)	*556	4 545	234	165	*7 424	425	25 551	24 155	26	27	21	1795
51 177	9 911	82 095	4 468	2 594	37 123	1 202	105 333	73 130	1	3	6	1796
96 636	27 456	113 047	6 166	4 912	45 598	5 149	257 699	154 486	6	6	23	1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	17 151	16 626	11 734	13 148	(Z)	1	1	2
Proprietors and working partners	7 051	4 426	4 174	7 837	2	3	3	4
All employees**	143 644	171 298	105 935	117 462	1	1	1	1
Construction workers:								
March	106 087	128 069	80 350	88 733	1	1	1	1
May	113 444	137 471	87 638	102 680	1	1	1	1
August	117 088	145 375	91 069	110 649	1	1	1	1
November	110 855	134 098	85 348	98 575	1	1	1	1
Average	111 868	136 253	87 157	100 232	1	1	1	1
Other employees:								
March	32 124	34 372	18 572	16 656	1	1	1	1
May	31 579	34 667	(NA)	(NA)	1	1	(NA)	(NA)
August	31 660	35 509	(NA)	(NA)	1	1	(NA)	(NA)
November	31 740	35 629	(NA)	(NA)	1	1	(NA)	(NA)
Average	31 776	35 044	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	3 160 154	3 287 807	1 566 101	1 177 913	(Z)	1	1	1
Payroll, construction workers	2 183 285	2 263 697	1 171 706	915 003	(Z)	1	1	1
Payroll, other employees	976 869	1 024 110	394 395	262 910	1	1	1	1
First-quarter payroll, all employees	716 550	728 722	350 140	239 222	1	1	1	1
Fringe benefits, all employees	596 478	574 532	285 260	168 738	1	1	1	1
Legally required expenditures	418 739	412 512	209 485	114 575	1	1	1	1
Voluntary expenditures	177 739	162 019	75 774	54 163	1	1	1	1
Dollar value of business done	14 293 435	16 051 667	6 721 709	5 110 287	1	1	1	1
Value of construction work	14 033 074	15 218 417	6 445 787	4 870 706	1	1	1	1
Value of construction work subcontracted in from others	3 984 035	3 937 361	1 693 082	1 296 053	2	2	1	1
Other business receipts	260 361	261 071	162 806	239 582	3	3	2	3
Net value of construction†	10 495 150	11 223 932	4 820 910	3 695 200	1	1	1	1
Value added††	6 110 086	6 624 200	2 852 040	2 131 151	1	1	1	1
Selected costs	8 183 349	8 855 287	3 756 552	2 854 222	1	1	1	1
Materials, components, and supplies	4 394 885	4 603 748	1 983 456	1 575 870	1	1	1	1
Construction work subcontracted out to others	3 537 923	3 994 485	1 624 876	1 175 505	1	1	1	1
Selected power, fuels, and lubricants	250 541	257 054	148 219	102 847	1	1	1	1
Electricity	44 089	34 869	18 531	14 572	2	3	2	4
Natural gas	12 188	8 790	4 209	5 186	3	4	8	3
Gasoline and diesel fuel	178 791	197 532	115 389	70 984	1	1	1	1
On highway use	128 747	138 676	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	50 044	58 856	(NA)	(NA)	2	1	(NA)	(NA)
Other, including lubricating oils and greases	15 473	15 861	10 089	12 109	3	2	2	4
Rental cost for machinery, equipment, and buildings	200 477	203 361	95 475	63 080	2	2	2	1
For machinery and equipment	123 572	139 597	72 652	50 625	3	2	2	1
For buildings	76 904	63 763	22 822	12 454	3	2	2	4
Selected purchased services	239 731	250 240	116 256	101 028	2	2	1	1
Communication services	74 088	57 278	28 768	21 680	3	2	2	4
Repairs to buildings and other structures	9 182	14 867	5 022	3 968	5	16	4	5
Repairs to machinery and equipment	156 461	178 094	82 465	75 381	2	2	1	1
Ownership of construction projects:								
Value of construction work	14 033 074	15 218 417	6 445 787	4 870 706	1	1	1	1
Government owned	3 430 131	2 570 037	1 469 019	1 113 441	2	2	2	1
Federal	1 134 883	849 368	(NA)	(NA)	3	2	(NA)	(NA)
State and local	2 295 249	1 720 668	(NA)	(NA)	2	2	(NA)	(NA)
Privately owned	10 602 942	12 648 380	4 976 768	3 757 264	2	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	2 267 149	1 992 370	3	2
Capital expenditures, other than land -----	186 642	340 238	3	3
New -----	138 208	280 005	4	3
Used -----	48 435	60 232	5	7
Retirements and disposition of depreciable assets -----	133 429	123 380	6	5
End-of-year gross book value of depreciable assets -----	2 320 362	2 209 228	3	2
Depreciation charges during year -----	240 510	275 572	2	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	308 051	430 320	14	4
Capital expenditures, other than land -----	21 942	51 920	13	4
New buildings and other structures -----	17 562	40 374	16	4
Used buildings and other structures -----	4 379	11 545	16	13
Retirements and disposition of depreciable assets -----	(S)	29 284	(S)	13
End-of-year gross book value of depreciable assets -----	317 021	452 955	14	4
Depreciation charges during year -----	22 224	40 864	10	4
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 959 098	1 562 050	2	3
Capital expenditures, other than land -----	164 701	288 318	3	3
New machinery and equipment, including automobiles and trucks -----	120 645	239 631	3	3
New automobiles and trucks, intended primarily for highway use -----	50 498	101 229	5	3
Used machinery and equipment, including automobiles and trucks -----	44 055	48 687	5	8
Retirements and disposition of depreciable assets -----	120 458	94 096	5	5
End-of-year gross book value of depreciable assets -----	2 003 341	1 756 272	2	3
Depreciation charges during year -----	218 286	234 707	2	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	17 151	(Z)
Value of construction work	14 033 074	1
Establishments with inventories:		
Number	4 441	2
Value of construction work	4 945 320	1
Inventories ¹ :		
End of 1992, materials and supplies	199 898	13
End of 1991, materials and supplies	207 220	15
Establishments with no inventories:		
Number	7 021	2
Value of construction work	6 174 848	2
Establishments not reporting:		
Number	5 690	2
Value of construction work	2 912 906	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	17 151	10 542	3 412	1 727	1 045	284	116	18	5	2	
All employees** -----	143 644	20 618	21 892	22 600	30 969	19 501	16 635	5 969	5 460	(D)	
Payroll, all employees -----	3 160 154	312 463	395 107	488 149	739 565	488 969	439 914	149 392	146 596	(D)	
Dollar value of business done -----	14 293 435	2 068 742	1 670 733	2 021 273	3 167 081	2 279 122	2 118 285	557 178	411 021	(D)	
Value of construction work -----	14 033 074	2 040 006	1 649 467	1 994 865	3 096 209	2 218 005	2 077 766	550 239	406 517	(D)	
Net value of construction work† -----	10 495 150	1 605 525	1 338 458	1 556 312	2 337 539	1 591 684	1 281 110	440 972	343 550	(D)	
Value added†† -----	6 110 086	853 908	794 083	869 377	1 397 756	979 784	695 716	269 072	250 390	(D)	
Cost of materials, components, supplies, and fuels -----	4 645 426	780 354	565 641	713 343	1 010 656	673 016	625 913	178 839	97 664	(D)	
Cost of construction work subcontracted out to others -----	3 537 923	434 481	311 010	438 553	758 669	626 321	796 656	109 267	62 967	(D)	
Rental cost for machinery, equipment, and buildings -----	200 477	17 356	23 165	32 724	40 317	36 527	30 531	11 384	8 472	(D)	
Capital expenditures, other than land -----	186 642	(S)	27 806	25 288	37 927	32 559	23 102	12 453	1 345	(D)	
End-of-year gross book value of depreciable assets -----	2 320 362	217 448	283 673	317 781	483 535	420 723	368 601	136 458	92 143	(D)	
1987											
All employees** -----	171 298	18 739	22 436	27 960	37 865	23 575	25 650	7 862	7 208	(D)	
Value of construction work -----	15 218 417	1 686 452	1 578 004	2 073 806	3 425 695	2 310 739	2 957 627	1 186 092	(D)	(D)	
Value added†† -----	6 624 200	720 463	699 158	960 254	1 512 055	987 939	1 197 953	317 778	228 598	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	3	4	3	2	1	1	(Z)	(Z)	(D)	
Net value of construction work† -----	1	5	4	3	1	(Z)	(Z)	(Z)	(Z)	(D)	
Capital expenditures, other than land -----	3	(S)	15	8	4	(Z)	1	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	17 151	(S)	(S)	2 536	4 678	3 006	1 849	1 461	525	289	208
All employees** -----	143 644	(S)	(S)	4 751	15 441	16 291	17 286	25 976	17 449	15 556	27 929
Payroll, all employees -----	3 160 154	(S)	(S)	53 350	211 626	284 320	343 070	590 648	443 153	416 808	794 939
Dollar value of business done -----	14 293 435	(S)	(S)	184 565	754 733	1 052 275	1 310 702	2 238 126	1 812 992	1 976 109	4 893 077
Value of construction work -----	14 033 074	(S)	(S)	183 190	745 315	1 035 968	1 295 404	2 204 827	1 786 023	1 929 882	4 782 169
Net value of construction work† -----	10 495 150	(S)	(S)	168 977	672 535	896 651	1 085 371	1 816 447	1 407 267	1 468 358	2 914 777
Value added†† -----	6 110 086	(S)	(S)	101 876	394 848	507 982	624 962	1 023 030	804 326	860 227	1 753 442
Cost of materials, components, supplies, and fuels -----	4 645 426	(S)	(S)	68 476	287 105	404 977	475 708	826 717	629 911	654 358	1 272 244
Cost of construction work subcontracted out to others -----	3 537 923	(S)	(S)	14 213	72 780	139 317	210 032	388 379	378 756	461 524	1 867 391
Rental cost for machinery, equipment, and buildings -----	200 477	(S)	(S)	1 409	10 474	14 362	22 992	33 682	27 774	31 629	57 450
Capital expenditures, other than land -----	186 642	(S)	(S)	2 683	15 170	17 488	17 273	35 106	24 934	29 605	43 014
End-of-year gross book value of depreciable assets -----	2 320 362	(S)	(S)	30 792	110 721	170 665	223 612	383 030	332 508	381 984	673 954
1987											
All employees** -----	171 298	(S)	(S)	(S)	(S)	17 246	18 524	29 485	25 295	20 591	34 580
Value of construction work -----	15 218 417	(S)	(S)	(S)	(S)	898 276	1 239 697	2 452 774	2 322 579	1 991 401	5 398 036
Value added†† -----	6 624 200	(S)	(S)	(S)	(S)	450 978	608 151	1 184 068	1 051 655	886 148	1 923 490
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	6	4	4	4	2	1	1	1
Net value of construction work† -----	1	(S)	(S)	5	4	4	4	3	3	5	1
Capital expenditures, other than land -----	3	(S)	(S)	20	12	13	11	8	4	12	1

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

VA—10 VIRGINIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	14 033 074	9 017 866	2 976 157	1 603 408	1	1	1	1
Building construction	10 711 414	7 154 020	2 499 195	1 058 199	1	2	2	2
Single-family houses	4 952 286	3 890 081	666 462	395 743	2	3	3	4
Single-family houses, detached	4 084 331	3 138 797	603 177	342 357	3	3	4	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	867 955	751 284	63 285	53 386	3	3	10	8
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	414 861	266 664	80 149	68 048	12	19	9	8
Other residential buildings, including hotels, motels, and tourist cabins	148 035	73 712	55 398	18 926	6	8	8	19
Office buildings	1 183 422	584 777	443 236	155 409	1	1	3	4
Other commercial buildings such as stores, restaurants, and automobile service stations	1 108 532	662 345	321 517	124 669	2	2	4	4
Industrial buildings and warehouses	1 056 913	561 908	317 416	177 590	2	2	3	5
Industrial buildings	884 874	448 177	279 508	157 190	2	2	3	5
Warehouses	172 039	113 731	37 908	20 399	4	5	4	6
Religious buildings	200 698	118 514	66 871	15 312	3	3	4	7
Educational buildings	667 203	428 043	194 783	44 376	1	2	3	6
Hospitals and institutional buildings	643 363	367 267	239 127	36 969	2	1	5	3
Other nonresidential buildings	336 101	200 709	114 235	21 157	4	4	9	4
Nonbuilding construction	2 886 018	1 863 846	476 963	545 210	1	1	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	954 210	560 956	163 713	229 542	1	1	3	3
Private driveways and parking areas	91 428	51 767	10 431	29 231	8	10	14	12
Bridges, tunnels, and elevated highways	185 533	136 768	37 859	10 905	2	2	3	18
Conservation and development construction	161 302	123 743	16 035	21 524	10	9	20	19
Power and communication transmission lines, towers, and related facilities	289 550	152 827	84 422	52 301	3	3	4	2
Sewers, water mains, and related facilities	444 786	375 856	36 254	32 676	3	3	7	10
Sewers, sewer lines, septic systems, and related facilities	291 709	252 142	21 023	18 544	3	3	9	16
Water mains and related facilities	153 077	123 714	15 231	14 132	4	4	8	7
Blast furnaces, petroleum refineries, chemical complexes, etc.	167 442	133 381	12 829	21 233	2	2	4	10
Sewage treatment and water treatment plants	87 214	(D)	28 988	(D)	3	(D)	8	(D)
Ships	84 389	(D)	13 667	(D)	4	(D)	8	(D)
Other nonbuilding construction	420 163	236 450	72 764	110 949	3	5	5	4
Construction work, n.s.k.	435 642	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1987								
Value of construction work	15 218 417	10 999 181	2 218 182	1 325 191	1	1	2	2
Building construction	11 559 951	8 871 981	1 845 133	842 838	1	1	2	2
Single-family houses	5 208 077	4 406 373	524 458	277 245	2	2	4	4
Single-family houses, detached	4 110 586	3 381 269	493 915	235 400	2	2	4	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	1 097 491	1 025 103	30 542	41 845	3	4	6	7
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	599 004	446 555	95 218	57 231	3	4	5	7
Other residential buildings, including hotels, motels, and tourist cabins	425 339	323 115	71 189	31 034	3	4	7	7
Office buildings	2 023 548	1 495 774	374 268	153 505	2	2	3	4
Other commercial buildings such as stores, restaurants, and automobile service stations	1 183 406	847 515	233 157	102 733	2	2	4	6
Industrial buildings and warehouses	1 031 046	697 833	202 128	131 083	2	2	4	5
Industrial buildings	745 849	463 906	172 046	109 896	2	2	4	5
Warehouses	285 197	233 927	30 082	21 187	4	5	5	5
Religious buildings	146 346	90 844	43 165	12 336	2	2	5	11
Educational buildings	392 674	243 939	123 743	24 991	2	2	4	11
Hospitals and institutional buildings	345 841	191 420	127 471	26 949	2	4	3	6
Other nonresidential buildings	204 670	128 613	50 336	26 631	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	2 982 603	2 127 200	373 049	482 353	2	2	3	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	966 945	621 591	151 918	193 436	2	2	2	4
Private driveways and parking areas	106 008	74 211	14 665	17 131	7	7	8	17
Bridges, tunnels, and elevated highways	267 049	214 484	38 766	13 799	2	2	4	20
Power and communication transmission lines, towers, and related facilities	204 476	125 223	28 710	50 542	3	3	13	2
Sewers, water mains, and related facilities	503 259	399 223	44 079	59 956	3	3	8	5
Sewers, sewer lines, septic systems, and related facilities	339 808	262 438	31 894	45 474	2	3	5	2
Water mains and related facilities	163 450	136 784	12 185	14 481	5	4	16	20
Blast furnaces, petroleum refineries, chemical complexes, etc.	52 931	40 539	2 598	9 793	6	4	22	19
Sewage treatment and water treatment plants	83 015	60 433	17 949	4 632	6	4	20	16
Other nonbuilding construction	798 920	591 496	74 364	133 064	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	675 863	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	17 151	111 868	106 087	113 444	117 088	110 855	(Z)	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	3 654	10 597	10 252	10 804	11 260	10 072	2	3	3	3	3	3
1522	Other residential buildings -----	167	960	952	993	972	922	16	11	12	11	10	11
1531	Operative builders -----	800	2 691	2 555	2 723	2 848	2 638	7	8	8	8	7	8
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	141	1 601	1 537	1 583	1 657	1 629	14	5	6	5	5	5
1542	Nonresidential buildings, n.e.c. -----	696	7 361	7 187	7 283	7 801	7 174	6	3	3	3	3	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	358	7 209	5 878	7 571	7 945	7 440	9	3	3	3	3	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	29	836	799	850	883	812	16	7	6	7	7	7
1623	Water, sewer, and utility lines -----	292	7 199	6 401	7 163	7 512	7 721	8	2	2	2	2	2
1629	Heavy construction, n.e.c. -----	483	6 094	5 955	5 891	6 389	6 140	8	2	2	3	2	2
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	2 168	13 953	13 426	14 116	14 299	13 972	2	2	2	2	2	2
1721	Painting and paper hanging -----	1 156	4 640	4 185	4 824	5 058	4 493	3	4	4	4	4	4
1731	Electrical work -----	1 413	10 661	10 341	10 617	11 012	10 673	2	2	2	2	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	986	6 398	6 179	6 682	6 463	6 269	3	4	5	5	4	4
1742	Plastering, drywall, and insulation work -----	468	5 724	5 565	6 084	5 752	5 496	5	3	3	3	3	3
1743	Terrazzo, tile, marble, and mosaic work -----	194	889	863	954	898	840	11	10	9	12	10	9
175	Carpentry and floor work:												
1751	Carpentry -----	1 062	4 320	4 099	4 603	4 479	4 097	4	5	5	5	5	5
1752	Floor laying and other floor work -----	362	1 180	1 092	1 198	1 285	1 144	6	6	6	7	7	7
1761	Roofing, siding, and sheet metal work -----	766	5 434	5 080	5 302	5 781	5 573	4	4	4	4	4	4
1771	Concrete work -----	661	4 609	4 066	4 637	5 033	4 699	5	4	4	4	4	4
1781	Water well drilling -----	103	469	462	498	486	429	15	8	8	7	8	8
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	73	982	1 160	883	918	968	16	6	8	6	8	6
1793	Glass and glazing work -----	95	501	495	516	520	472	17	9	10	7	9	12
1794	Excavation work -----	318	1 838	1 652	1 829	2 002	1 870	9	6	6	6	6	6
1795	Wrecking and demolition work -----	14	103	110	95	85	122	25	24	25	29	26	18
1796	Installing building equipment, n.e.c. -----	78	1 830	2 358	1 652	1 687	1 624	4	1	1	2	2	2
1799	Special trade contractors, n.e.c. -----	614	3 791	3 438	4 094	4 063	3 567	7	6	6	6	6	6

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.4	22.0	125.4	.225	.331	.252	.284	.014
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.9	16.8	132.4	.172	.370	.277	.030	.008
1522	Other residential buildings -----	8.1	20.6	212.8	.135	.263	.424	*.042	.007
1531	Operative builders -----	7.1	28.3	809.3	.074	.293	.352	.008	.004
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	15.8	23.7	180.1	.182	.270	.434	.034	.010
1542	Nonresidential buildings, n.e.c. -----	15.0	27.1	301.0	.128	.220	.618	.026	.006
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	24.8	23.3	125.6	.227	.377	.202	.256	.025
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	33.5	26.2	151.5	.204	.329	.278	.147	.042
1623	Water, sewer, and utility lines -----	28.9	24.1	88.4	.319	.282	.122	.217	.032
1629	Heavy construction, n.e.c. -----	15.5	25.8	105.5	.300	.294	.156	.166	.030
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.5	23.2	98.5	.312	.426	.076	.606	.014
1721	Painting and paper hanging -----	4.8	17.6	55.4	.380	.246	.086	.529	.015
1731	Electrical work -----	9.5	24.6	90.0	.345	.425	.041	.612	.014
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	7.3	15.7	47.6	.371	(D)	(D)	.765	.013
1742	Plastering, drywall, and insulation work -----	14.7	21.7	70.2	.372	.364	.083	.819	.015
1743	Terrazzo, tile, marble, and mosaic work -----	5.8	18.1	74.7	.308	.457	.037	.769	.017
175	Carpentry and floor work:								
1751	Carpentry -----	4.9	18.3	76.7	.289	.343	.125	.676	.017
1752	Floor laying and other floor work -----	4.5	20.6	104.5	.270	.490	.088	.713	.013
1761	Roofing, siding, and sheet metal work -----	8.8	19.1	75.9	.312	.435	.066	.503	.015
1771	Concrete work -----	8.3	19.3	75.0	.306	.371	.070	.718	.035
1781	Water well drilling -----	6.1	23.6	107.7	.293	.464	(D)	.083	.010
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	16.5	27.0	91.4	.360	.296	.117	.830	.030
1793	Glass and glazing work -----	8.0	22.0	112.2	.298	.530	.013	.625	.020
1794	Excavation work -----	7.0	20.5	97.0	.255	.315	.167	.565	.036
1795	Wrecking and demolition work -----	9.0	20.8	70.6	.366	(D)	.077	.625	.032
1796	Installing building equipment, n.e.c. -----	29.9	26.0	101.3	.325	.276	.053	.443	.024
1799	Special trade contractors, n.e.c. -----	7.9	18.8	75.8	.317	.336	.095	.393	.021

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA											
15,16, 17	Construction industries	17 387	176 268	4 603 770	20 018 974	14 144 696	8 669 507	6 022 675	5 874 278	192 779	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	3 588	15 929	309 642	1 698 388	1 241 643	695 235	566 367	456 745	20 692	4	4
1522	Other residential buildings	226	1 477	36 166	276 579	138 249	97 076	45 215	138 329	847	9	27
1531	Operative builders	678	7 392	236 515	2 926 613	1 717 507	1 050 013	922 273	1 209 106	11 497	3	3
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	80	1 195	31 408	165 692	90 417	48 216	43 526	75 275	1 460	11	11
1542	Nonresidential buildings, n.e.c.	1 059	18 505	585 079	4 356 708	1 674 712	1 048 575	758 462	2 681 996	14 054	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	245	8 767	251 414	1 021 315	792 948	491 292	332 230	228 367	25 055	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	28	1 230	30 403	128 658	93 101	59 929	33 593	35 557	1 847	3	3
1623	Water, sewer, and utility lines	232	7 525	195 589	624 327	542 529	356 139	190 347	81 798	17 495	2	2
1629	Heavy construction, n.e.c.	252	7 451	302 916	914 799	681 091	437 734	252 784	233 708	9 634	2	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	2 187	24 142	675 399	2 221 471	1 903 537	1 111 170	813 141	317 934	24 730	1	1
1721	Painting and paper hanging	1 034	6 502	127 442	311 669	286 571	209 593	78 866	25 098	3 125	5	4
1731	Electrical work	1 621	18 541	512 527	1 475 819	1 429 858	841 135	606 962	45 961	17 122	2	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	794	7 256	137 152	351 135	334 418	206 847	129 792	16 717	5 647	3	3
1742	Plastering, drywall, and insulation work	547	8 514	218 153	556 510	496 262	322 717	175 708	60 248	6 108	3	2
1743	Terrazzo, tile, marble, and mosaic work	193	1 107	27 990	77 320	75 029	42 743	32 750	2 291	*623	8	7
175	Carpentry and floor work:											
1751	Carpentry	1 287	7 068	137 931	418 740	356 845	223 581	136 642	61 895	4 777	5	5
1752	Floor laying and other floor work	342	1 951	46 253	196 556	178 225	82 497	99 330	18 331	1 344	6	6
1761	Roofing, siding, and sheet metal work	790	7 361	172 130	484 263	455 997	272 976	186 542	28 266	4 393	3	3
1771	Concrete work	771	8 849	182 629	650 557	590 618	337 123	256 713	59 939	10 278	3	2
1781	Water well drilling	45	420	11 647	35 350	35 127	23 589	11 566	(S)	1 160	4	6
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	77	1 420	43 891	120 697	112 610	72 141	41 465	8 087	2 505	7	6
1793	Glass and glazing work	121	1 090	28 351	86 542	83 848	44 209	41 570	2 693	311	6	5
1794	Excavation work	417	2 874	71 092	244 695	211 045	162 126	62 327	33 649	3 288	7	6
1795	Wrecking and demolition work	33	631	13 288	44 454	40 376	32 910	9 327	4 078	842	4	3
1796	Installing building equipment, n.e.c.	105	3 067	89 574	272 269	262 072	187 194	78 227	10 198	1 040	2	3
1799	Special trade contractors, n.e.c.	635	6 003	129 189	357 849	320 061	212 747	116 949	37 788	2 904	5	4
	Baltimore, MD PMSA											
15,16, 17	Construction industries	6 647	59 167	1 447 718	6 196 218	4 592 118	2 854 549	1 975 464	1 604 100	74 913	1	1
	(See appropriate State for SIC detail.)											
	Hagerstown, MD PMSA											
15,16, 17	Construction industries	347	3 026	65 872	283 106	206 110	114 847	98 262	76 996	3 806	5	5
	(See appropriate State for SIC detail.)											

VA—14 VIRGINIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.											
	Washington, DC—MD—VA—WV PMSA											
15,16, 17	Construction industries	10 393	114 075	3 090 179	13 539 649	9 346 467	5 700 111	3 948 948	4 193 182	114 060	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	2 093	9 503	192 733	965 039	696 093	374 061	334 635	268 947	10 749	5	6
1522	Other residential buildings	142	1 016	25 381	209 532	99 368	67 967	34 552	110 164	523	9	37
1531	Operative builders	452	5 377	173 629	2 104 677	1 228 742	702 215	693 870	875 935	8 651	3	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	45	471	15 366	96 313	47 475	32 419	(D)	48 838	884	24	19
1542	Nonresidential buildings, n.e.c.	667	13 705	445 460	3 244 455	1 261 505	805 537	495 454	1 982 950	10 441	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	145	4 973	144 149	583 830	457 271	283 120	188 816	126 559	10 146	3	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	*10	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	162	5 245	129 511	424 257	369 281	249 331	122 119	54 976	12 942	3	2
1629	Heavy construction, n.e.c.	(S)	5 450	243 005	656 246	(D)	312 991	157 161	(D)	(D)	2	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 350	15 257	438 623	1 422 452	1 204 782	703 226	516 565	217 671	15 393	2	1
1721	Painting and paper hanging	637	4 279	81 944	198 314	179 801	134 149	46 864	18 513	1 493	6	4
1731	Electrical work	975	11 920	339 994	1 000 035	965 642	564 687	414 826	34 393	10 450	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	471	4 693	88 901	226 767	217 210	131 892	86 872	9 557	4 500	4	4
1742	Plastering, drywall, and insulation work	338	5 597	147 063	373 788	332 416	215 892	118 267	41 372	4 752	4	2
1743	Terrazzo, tile, marble, and mosaic work	131	846	21 602	62 044	59 951	33 638	26 768	2 093	(D)	9	7
175	Carpentry and floor work:											
1751	Carpentry	731	4 103	86 552	264 674	223 856	134 998	89 399	40 817	2 756	5	6
1752	Floor laying and other floor work ..	201	1 334	(D)	145 145	130 936	61 117	73 373	14 210	860	6	7
1761	Roofing, siding, and sheet metal work	409	4 396	109 476	300 776	283 762	170 788	114 107	17 014	2 404	3	3
1771	Concrete work	473	5 648	110 931	421 305	376 635	212 667	166 998	44 670	5 838	3	3
1781	Water well drilling	21	(D)	(D)	(D)	(D)	(D)	5 588	(D)	526	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	43	786	22 353	60 827	55 808	37 994	(D)	5 019	(S)	10	10
1793	Glass and glazing work	82	750	21 023	63 211	61 434	33 976	29 388	1 777	(D)	8	7
1794	Excavation work	250	1 877	44 243	166 462	140 273	105 750	44 452	26 190	1 910	9	8
1795	Wrecking and demolition work	10	167	3 707	(D)	(D)	12 724	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c. ..	52	2 399	68 420	210 083	204 030	143 129	60 901	6 053	870	3	4
1799	Special trade contractors, n.e.c.	369	3 659	85 383	239 475	211 441	138 336	78 984	28 035	(D)	6	5
	NORFOLK—VIRGINIA BEACH—NEWPORT NEWS, VA—NC MSA											
15,16, 17	Construction industries	3 475	31 916	661 209	3 264 139	2 370 699	1 311 542	1 107 870	893 440	37 724	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	618	1 945	32 464	281 541	189 762	80 358	111 758	91 779	(S)	9	13
1522	Other residential buildings	62	566	11 690	81 345	40 374	16 639	23 880	*40 971	433	17	19
1531	Operative builders	153	1 356	34 587	545 208	383 373	262 391	143 290	161 834	(S)	13	10
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	571	15 070	96 276	60 619	29 503	31 697	35 658	(S)	9	12
1542	Nonresidential buildings, n.e.c.	132	2 180	57 306	551 452	191 636	76 171	119 639	359 816	3 125	4	4

CONSTRUCTION—GEOGRAPHIC AREA SERIES

VIRGINIA VA—15

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NORFOLK—VIRGINIA BEACH—NEWPORT NEWS, VA—NC MSA—Con.											
15,16,17	Construction industries—Con.											
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	56	1 902	43 906	184 283	139 793	63 672	82 879	44 490	4 007	5	4
162	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	8	329	8 677	37 456	31 907	11 472	20 450	5 549	391	(Z)	(Z)
1622		59	1 330	27 646	93 246	84 772	54 914	30 655	8 475	2 632	6	6
1623		87	2 419	66 520	216 101	172 139	106 150	66 529	43 962	4 275	5	4
1629	Heavy construction, n.e.c. -----											
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	478	4 169	90 488	329 514	294 906	157 417	141 256	34 609	4 136	4	3
1721	Painting and paper hanging-----	248	1 823	29 840	82 257	73 970	54 415	19 730	8 287	(S)	6	5
1731	Electrical work -----	300	2 839	59 202	191 267	183 953	97 864	86 299	7 315	1 629	4	4
174	Masonry, stone work, tile setting, and plastering: Masonry, stone setting, and other stone work-----											
1741		181	1 958	27 234	73 080	66 810	36 152	30 658	(S)	1 521	11	10
1742		137	1 440	30 229	92 321	81 340	46 963	34 948	10 980	995	7	7
1743		34	332	5 344	14 865	14 716	7 058	7 889	149	96	22	8
175	Carpentry and floor work: Carpentry-----	276	1 352	22 140	75 354	63 755	35 811	27 999	(S)	569	9	7
1751		66	283	4 741	16 450	14 549	9 079	6 141	*1 900	*190	13	11
1752	Floor laying and other floor work ---											
1761	Roofing, siding, and sheet metal work -----	148	1 617	28 907	93 511	90 715	48 721	42 068	2 796	2 056	7	6
1771	Concrete work -----	119	1 033	17 206	55 759	51 140	30 308	21 281	4 619	(S)	12	11
1781	Water well drilling -----	10	*56	*1 091	*4 423	*4 349	2 151	*2 198	(S)	(D)	41	46
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	20	276	5 265	13 197	12 026	8 790	4 210	1 171	(D)	13	22
1793	Glass and glazing work -----	28	187	3 583	18 337	18 209	9 236	9 103	128	22	21	27
1794	Excavation work-----	21	200	4 322	13 511	10 792	4 715	6 277	2 719	1 044	20	18
1795	Wrecking and demolition work -----	*6	*57	*1 555	*3 462	*2 999	*2 053	*1 018	*463	*61	57	59
1796	Installing building equipment, n.e.c. -	12	210	6 757	16 849	14 650	11 877	5 573	2 199	438	10	13
1799	Special trade contractors, n.e.c.-----	174	1 486	25 440	83 076	77 445	47 664	30 446	5 631	1 755	12	11
	RICHMOND—PETERSBURG, VA MSA											
15,16,17	Construction industries -----	2 951	26 400	595 052	2 454 846	1 913 486	1 142 623	821 860	541 360	33 222	1	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings: Single-family houses -----	524	2 089	37 105	237 530	172 619	88 889	85 046	64 911	2 211	8	11
1521		28	(S)	2 984	(S)	(S)	(S)	(S)	(S)	*28	(S)	(S)
1522												
1531	Operative builders -----	218	856	26 845	343 382	235 108	116 292	127 191	108 274	1 460	12	20
154	General contractors, nonresidential buildings: Industrial buildings and warehouses-----	30	433	8 793	54 269	23 560	10 779	13 257	30 709	(D)	8	20
1541		91	1 250	33 820	308 342	115 343	56 935	59 349	192 999	2 173	8	7
1542												
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	46	1 478	35 945	148 788	129 099	82 347	52 709	19 689	5 067	4	3
162	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1622		50	1 851	46 842	127 112	114 891	89 599	25 730	12 221	4 291	4	4
1623		60	1 030	27 227	113 854	91 559	60 233	36 906	22 295	2 865	5	3
1629	Heavy construction, n.e.c. -----											

VA—16 VIRGINIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	RICHMOND-PETERSBURG, VA MSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	335	3 835	94 638	301 007	277 318	155 296	123 858	23 689	2 365	3	3
1721	Painting and paper hanging-----	221	1 127	19 918	48 273	45 573	33 481	12 439	2 700	455	7	7
1731	Electrical work -----	297	2 455	59 508	152 113	146 016	84 725	63 655	6 097	2 285	3	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	181	1 363	21 929	54 024	51 333	29 880	21 575	2 691	(S)	8	8
1742	Plastering, drywall, and insulation work -----	76	2 081	47 612	112 715	102 674	72 618	35 536	10 041	706	4	4
1743	Terrazzo, tile, marble, and mosaic work -----	26	139	2 566	7 618	7 332	4 518	2 953	*287	67	20	14
175	Carpentry and floor work:											
1751	Carpentry-----	165	704	12 131	42 010	38 280	24 063	14 390	(S)	409	13	11
1752	Floor laying and other floor work ---	115	564	10 538	33 743	31 084	16 037	17 131	2 659	736	15	15
1761	Roofing, siding, and sheet metal work -----	152	893	15 730	52 140	48 524	26 568	22 296	3 617	660	9	8
1771	Concrete work -----	91	1 114	19 909	56 966	54 228	32 522	23 168	2 738	1 141	6	6
1781	Water well drilling -----	*13	162	3 771	10 330	(D)	6 992	5 601	(D)	(D)	14	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	17	366	11 479	42 496	36 290	23 575	13 436	6 206	422	7	4
1793	Glass and glazing work -----	9	114	3 031	8 245	(D)	4 963	4 383	(D)	57	(Z)	(D)
1794	Excavation work-----	67	528	10 951	44 732	38 652	26 111	15 867	6 080	2 983	14	14
1795	Wrecking and demolition work -----	*4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -	22	555	17 867	57 793	53 216	38 381	15 810	4 577	937	5	9
1799	Special trade contractors, n.e.c.----	113	1 083	21 872	70 236	64 099	45 387	23 529	6 138	881	11	16

Contents

West Virginia

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for West Virginia. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 11,569 establishments in this State operating in the construction industries. These establishments accounted for \$2.2 billion in total dollar value of business done.

Most of the 11,569 construction establishments were small. Of the total, 7,974 were nonemployers, and over half of the employer establishments had less than 5 employees. The 1,132 construction establishments with 5 employees or more, while representing only 10 percent of all establishments, accounted for more than 78 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$2.1 billion in total dollar value of business done. Of this amount, \$2.0 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$283 million, leaving net value of construction work of \$1.7 billion. In addition, these establishments paid out \$779 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$1.1 billion. (See Introduction and appendixes for explanation of terms.)

There were 3,595 establishments with total employment averaging 24,982 during the year. Total payroll for 1992 was \$542 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 7,974 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$155 million. Most of these establishments, about 78 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

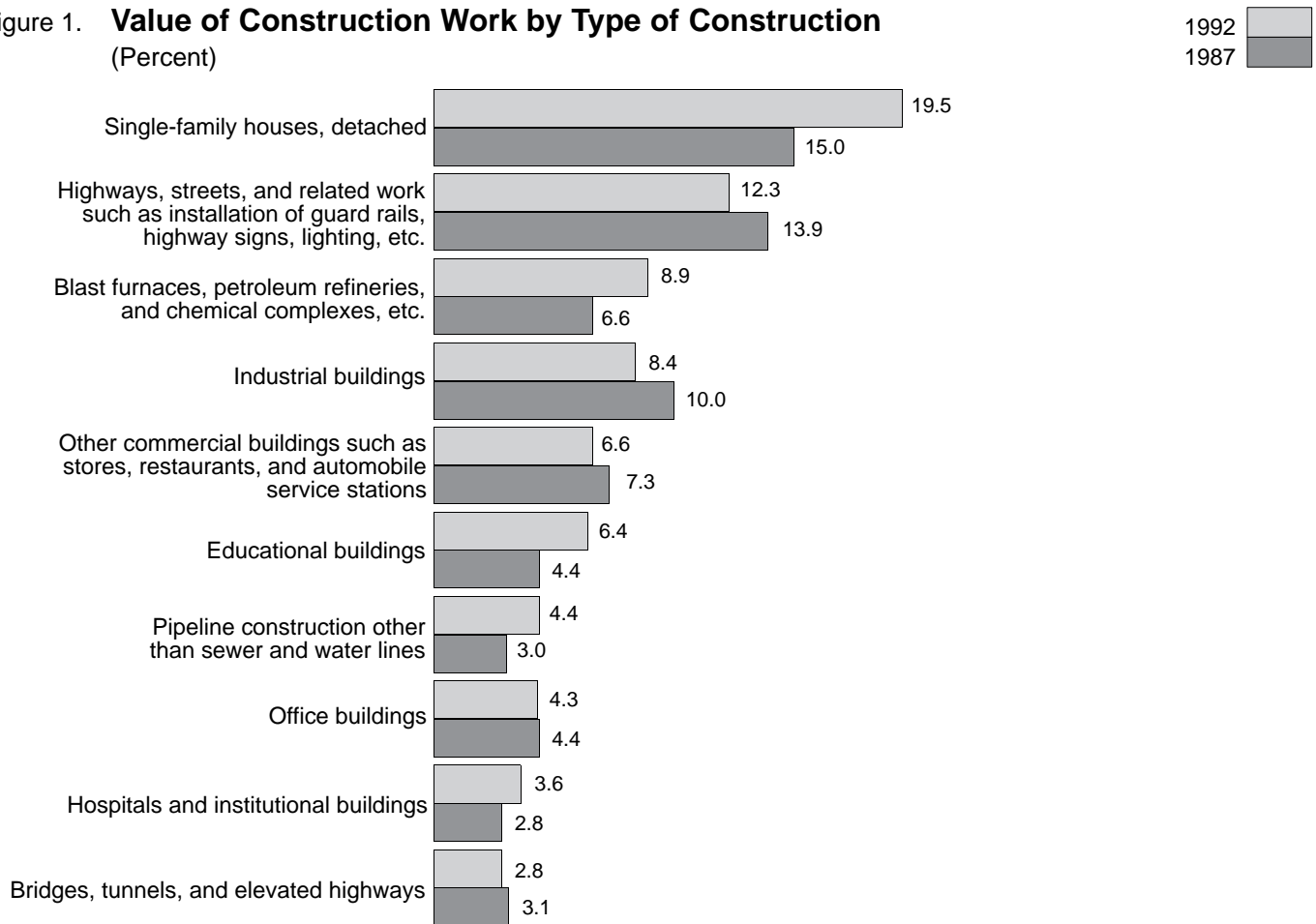


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

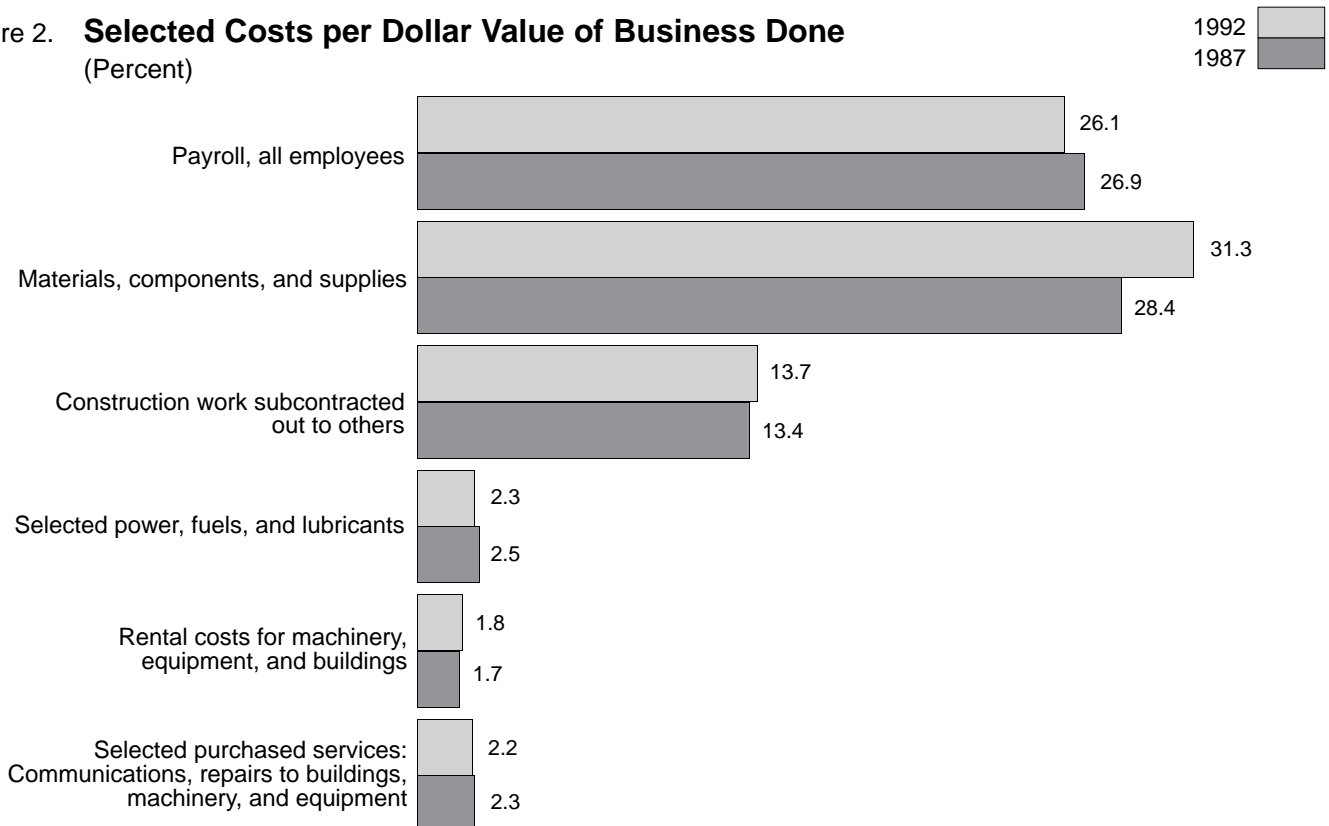


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	11 569	10 176	24 982	2 228 610	7 974	7 968	154 915	3 595	2 208	24 982	2 073 695	1	1
15	Building construction—General contractors and operative builders ----	2 958	2 494	6 375	647 518	1 521	1 507	54 317	1 437	987	6 375	593 201	4	4
16	Heavy construction other than building construction—contractors -----	556	319	7 941	754 091	221	208	5 637	335	111	7 941	748 454	2	1
17	Special trade contractors -----	8 055	7 364	10 666	827 001	6 232	6 253	94 961	1 823	1 111	10 666	732 040	3	2
1711	Plumbing, heating, and air-conditioning --	941	720	2 650	214 811	542	543	12 982	399	177	2 650	201 829	5	4
1731	Electrical work -----	735	610	2 149	152 921	474	471	6 286	261	139	2 149	146 635	6	5
	1987													
15, 16, 17	Construction industries² -----	11 550	9 356	20 669	1 712 872	8 713	8 586	220 929	2 837	770	20 669	1 491 943	2	2
15	Building construction—General contractors and operative builders ----	2 948	2 080	5 689	518 497	1 933	1 850	71 775	1 015	230	5 689	446 722	4	5
16	Heavy construction other than building construction—contractors -----	492	259	6 207	523 331	178	175	13 761	314	84	6 207	509 570	2	2
17	Special trade contractors -----	7 863	6 857	8 738	646 052	6 393	6 413	112 587	1 470	444	8 738	533 465	3	3
1711	Plumbing, heating, and air-conditioning --	893	629	2 233	157 550	541	536	16 217	352	93	2 233	141 333	7	5
1731	Electrical work -----	650	476	1 742	105 249	449	444	7 611	201	32	1 742	97 638	6	5

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	3 595	24 982	20 244	541 649	411 521	1 998 433	1 715 113	1 093 773
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	1 031	3 139	2 506	42 174	32 827	220 794	175 864	88 170
1522	Other residential buildings -----	*28	*84	*75	*1 095	*906	*5 526	*4 667	*2 681
1531	Operative builders -----	116	408	273	9 412	4 115	66 201	49 332	30 156
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	69	709	564	16 006	11 772	61 953	48 589	33 378
1542	Nonresidential buildings, n.e.c. -----	194	2 035	1 615	45 852	34 490	223 044	134 836	86 021
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	78	2 275	1 871	65 144	49 251	263 172	211 476	138 699
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	6	140	119	5 706	4 571	27 422	21 813	12 018
1623	Water, sewer, and utility lines -----	89	1 782	1 470	55 868	38 561	154 245	144 719	115 886
1629	Heavy construction, n.e.c. -----	162	3 744	3 145	85 566	67 165	259 820	246 449	154 687
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	399	2 650	2 036	51 130	37 831	196 810	182 903	106 497
1721	Painting and paper hanging -----	95	294	262	5 467	4 224	13 906	13 608	10 342
1731	Electrical work -----	261	2 149	1 780	55 757	46 049	145 823	143 718	92 182
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	177	(D)	584	6 963	6 435	(D)	(D)	18 234
1742	Plastering, drywall, and insulation work -----	30	249	211	5 613	4 512	15 640	13 584	9 612
1743	Terrazzo, tile, marble, and mosaic work -----	7	37	28	529	384	1 621	1 565	930
175	Carpentry and floor work:								
1751	Carpentry -----	188	755	609	12 602	9 743	47 805	43 702	26 971
1752	Floor laying and other floor work -----	34	112	87	1 518	1 239	4 583	4 075	2 516
1761	Roofing, siding, and sheet metal work -----	143	1 171	957	25 893	18 723	85 488	83 483	48 433
1771	Concrete work -----	123	703	544	11 160	8 565	48 485	42 862	30 152
1781	Water well drilling -----	46	100	88	1 331	1 204	7 648	7 581	4 174
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	22	252	187	4 754	3 666	16 536	15 345	9 644
1793	Glass and glazing work -----	16	95	67	2 123	1 396	7 013	6 843	3 863
1794	Excavation work -----	153	544	457	8 873	7 086	39 587	37 397	31 013
1795	Wrecking and demolition work -----	3	(D)	(D)	50	50	(D)	(D)	105
1796	Installing building equipment, n.e.c. -----	18	169	144	4 301	3 679	12 942	12 856	7 048
1799	Special trade contractors, n.e.c. -----	108	(D)	(D)	16 760	13 079	41 940	39 658	30 362

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
696 603	283 320	407 509	36 630	48 532	465 601	20 669	1 440 174	825 347	1	1	6	15, 16, 17
												15
91 723	(S)	7 291	1 750	3 718	16 808	2 440	139 313	65 780	7	7	24	152
*2 139	*860	(S)	(S)	—	(S)	302	25 915	8 993	47	63	—	1521
26 295	(S)	257	149	(S)	3 719	305	38 457	18 738	19	21	(S)	1531
16 363	13 364	1 465	698	343	9 346	685	53 197	28 778	14	10	21	154
52 044	88 208	5 643	2 784	2 720	24 767	1 957	176 259	72 440	8	5	18	1542
												16
104 710	51 696	49 196	7 953	10 481	151 129	1 793	209 236	121 143	3	3	2	1611
9 869	5 609	—	601	376	10 513	290	31 295	15 174	(Z)	(Z)	(Z)	162
31 430	9 526	7 386	5 477	5 920	63 812	1 769	100 584	77 029	3	2	10	1622
100 953	13 371	58 283	8 014	10 659	67 864	2 355	146 887	106 930	3	3	19	1623
												17
81 425	13 907	82 143	2 183	2 811	21 234	2 233	138 243	75 795	5	5	26	1711
(D)	298	(D)	410	219	2 965	289	14 615	11 548	23	19	39	1721
52 348	2 105	67 390	(S)	(S)	16 201	1 742	96 078	64 001	6	5	(S)	1731
9 773	(D)	26 245	*351	*811	4 053	484	12 511	9 265	(D)	(D)	41	174
4 010	*2 056	*12 862	420	(S)	*3 046	331	19 425	13 316	22	12	(S)	1742
(D)	56	136	*60	21	*267	39	3 165	2 023	22	21	14	1743
17 168	4 104	22 259	620	848	4 952	398	18 513	10 341	13	15	30	175
(D)	508	2 425	43	*82	620	*100	6 172	*2 748	10	8	41	1752
36 826	2 005	19 827	922	1 708	14 918	935	55 959	33 798	7	5	27	1761
14 165	5 622	(S)	(D)	815	10 304	634	42 104	22 503	14	10	32	1771
3 407	67	370	(S)	*385	5 073	152	8 480	4 201	24	22	42	1781
5 701	1 191	7 629	*831	*129	2 779	191	10 555	8 459	23	21	47	179
3 874	170	4 833	77	*87	724	82	5 590	3 085	4	4	71	1791
9 436	2 190	(S)	563	1 826	22 936	431	32 213	21 636	17	14	22	1793
75	(D)	(D)	(D)	(D)	(D)	42	(D)	1 882	(D)	(D)	(D)	1794
5 808	86	2 414	121	(D)	(D)	202	33 729	14 444	(Z)	(Z)	(D)	1795
10 284	2 283	4 036	(D)	*1 275	*6 250	453	18 479	10 869	(D)	12	61	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	3 595	2 837	3 075	3 736	1	2	3	4
Proprietors and working partners	2 208	770	1 201	2 435	3	8	6	7
All employees**	24 982	20 669	23 068	30 801	1	2	2	2
Construction workers:								
March	16 843	14 391	17 812	22 725	2	2	2	2
May	20 637	17 046	20 071	29 149	1	2	2	2
August	22 459	19 210	20 697	29 685	2	2	2	2
November	21 038	17 587	19 239	27 032	2	2	2	2
Average	20 244	17 059	19 789	27 168	1	2	2	2
Other employees:								
March	4 635	3 534	3 235	3 475	2	3	2	5
May	4 561	3 574	(NA)	(NA)	2	3	(NA)	(NA)
August	4 796	3 748	(NA)	(NA)	2	3	(NA)	(NA)
November	4 960	3 586	(NA)	(NA)	3	3	(NA)	(NA)
Average	4 738	3 610	(NA)	(NA)	2	3	(NA)	(NA)
Payroll, all employees	541 649	401 356	413 918	369 459	1	1	1	1
Payroll, construction workers	411 521	309 579	344 602	312 001	1	1	1	1
Payroll, other employees	130 128	91 776	69 316	57 458	2	2	2	3
First-quarter payroll, all employees	108 560	76 136	89 091	67 734	2	2	2	1
Fringe benefits, all employees	144 170	93 030	81 005	75 442	2	2	1	7
Legally required expenditures	94 348	61 960	54 871	40 953	2	2	2	5
Voluntary expenditures	49 822	31 069	26 133	34 489	3	2	1	10
Dollar value of business done	2 073 695	1 491 943	1 284 769	1 170 625	1	2	2	2
Value of construction work	1 998 433	1 440 174	1 236 899	1 107 206	1	2	2	1
Value of construction work subcontracted in from others	407 509	214 993	264 364	210 391	5	5	3	2
Other business receipts	75 262	45 486	43 590	63 419	5	4	3	5
Net value of construction†	1 715 113	1 240 308	1 071 405	972 374	1	2	2	1
Value added††	1 093 773	825 347	741 182	634 943	1	2	1	1
Selected costs	979 922	630 312	539 307	523 149	2	3	2	2
Materials, components, and supplies	648 666	423 681	337 514	363 696	2	2	2	2
Construction work subcontracted out to others	283 320	199 865	165 494	134 832	3	5	3	3
Selected power, fuels, and lubricants	47 936	36 765	36 298	24 622	3	3	3	2
Electricity	4 841	3 887	3 077	3 286	4	3	6	5
Natural gas	2 112	2 274	2 377	1 624	5	12	4	8
Gasoline and diesel fuel	38 392	27 525	28 132	16 907	3	3	3	2
On highway use	22 228	16 970	(NA)	(NA)	3	3	(NA)	(NA)
Off highway use	16 164	10 554	(NA)	(NA)	4	6	(NA)	(NA)
Other, including lubricating oils and greases	2 591	3 078	2 711	2 805	6	9	5	5
Rental cost for machinery, equipment, and buildings	36 630	25 846	20 010	13 584	6	5	4	2
For machinery and equipment	28 555	20 433	15 974	11 779	8	5	4	2
For buildings	8 075	5 412	4 035	1 805	6	8	7	5
Selected purchased services	46 037	34 448	30 759	30 308	5	4	3	9
Communication services	9 824	6 336	6 023	4 809	4	4	4	4
Repairs to buildings and other structures	1 886	1 734	919	1 403	7	30	7	10
Repairs to machinery and equipment	34 326	26 377	23 816	24 096	5	4	3	11
Ownership of construction projects:								
Value of construction work	1 998 433	1 440 174	1 236 899	1 107 206	1	2	2	1
Government owned	557 388	398 675	268 256	210 922	5	3	5	1
Federal	118 372	133 353	(NA)	(NA)	7	6	(NA)	(NA)
State and local	439 016	265 321	(NA)	(NA)	6	4	(NA)	(NA)
Privately owned	1 441 045	1 041 498	968 642	896 284	3	3	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	445 305	293 689	4	5
Capital expenditures, other than land -----	48 532	39 628	6	6
New -----	34 299	30 990	6	6
Used -----	14 232	8 638	10	14
Retirements and disposition of depreciable assets -----	28 236	25 159	11	37
End-of-year gross book value of depreciable assets -----	465 601	308 158	3	4
Depreciation charges during year-----	52 181	32 365	5	5
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	43 554	39 912	7	9
Capital expenditures, other than land -----	3 404	2 970	16	15
New buildings and other structures -----	2 481	2 140	18	17
Used buildings and other structures -----	923	829	32	26
Retirements and disposition of depreciable assets -----	1 255	921	36	14
End-of-year gross book value of depreciable assets -----	45 703	41 961	6	8
Depreciation charges during year-----	3 882	3 650	11	9
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	401 751	253 776	4	5
Capital expenditures, other than land -----	45 127	36 658	6	7
New machinery and equipment, including automobiles and trucks -----	31 818	28 849	7	7
New automobiles and trucks, intended primarily for highway use -----	11 070	8 480	9	9
Used machinery and equipment, including automobiles and trucks -----	13 309	7 809	11	16
Retirements and disposition of depreciable assets -----	26 980	24 238	11	38
End-of-year gross book value of depreciable assets -----	419 898	266 197	4	4
Depreciation charges during year-----	48 299	28 715	5	5

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	3 595	1
Value of construction work	1 998 433	1
Establishments with inventories:		
Number	895	5
Value of construction work	757 106	2
Inventories ¹ :		
End of 1992, materials and supplies	24 215	9
End of 1991, materials and supplies	24 704	8
Establishments with no inventories:		
Number	1 511	4
Value of construction work	707 497	2
Establishments not reporting:		
Number	1 189	4
Value of construction work	533 829	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	3 595	2 464	583	334	155	38	16	4	2		
All employees** -----	24 982	4 491	3 728	4 284	4 669	2 660	2 292	2 858	(D)		
Payroll, all employees -----	541 649	55 430	63 495	86 622	118 618	79 249	65 115	73 119	(D)		
Dollar value of business done -----	2 073 695	345 546	241 829	321 369	445 255	288 404	163 097	268 196	(D)		
Value of construction work -----	1 998 433	338 007	231 428	312 867	433 486	285 781	152 131	244 734	(D)		
Net value of construction work† -----	1 715 113	287 533	205 321	278 452	355 476	238 752	349 580	(D)	(D)		
Value added†† -----	1 093 773	165 809	126 257	168 634	220 089	138 842	118 276	155 865	(D)		
Cost of materials, components, supplies, and fuels -----	696 603	129 262	89 465	118 319	147 155	102 533	109 867	(D)	(D)		
Cost of construction work subcontracted out to others --	283 320	(S)	26 106	34 415	78 010	47 029	47 285	(D)	(D)		
Rental cost for machinery, equipment, and buildings -----	36 630	5 178	2 810	7 945	7 896	3 815	3 839	5 147	(D)		
Capital expenditures, other than land -----	48 532	6 139	4 857	9 307	10 260	8 105	1 730	8 134	(D)		
End-of-year gross book value of depreciable assets ----	465 601	53 984	41 362	75 999	89 382	83 991	56 766	64 116	(D)		
1987											
All employees** -----	20 669	(S)	3 585	4 065	4 368	1 966	3 400	(D)	(D)		
Value of construction work -----	1 440 174	(S)	217 021	233 919	358 727	168 957	248 281	(D)	(D)		
Value added†† -----	825 347	(S)	111 680	134 683	197 091	91 020	182 621	(D)	(D)		
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	6	9	8	4	4	(Z)	(Z)	(D)		
Net value of construction work† -----	1	7	9	7	2	1	(Z)	(D)	(D)		
Capital expenditures, other than land -----	6	15	23	19	5	(Z)	(Z)	(Z)	(D)		

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	3 595	(S)	(S)	548	1 032	515	362	216	78	38	27
All employees** -----	24 982	(S)	666	1 018	3 159	2 633	3 464	3 797	2 655	2 414	4 965
Payroll, all employees -----	541 649	(S)	(S)	9 778	38 230	40 604	64 408	90 759	66 022	74 994	150 315
Dollar value of business done -----	2 073 695	(S)	18 340	40 120	165 371	172 183	253 513	332 983	268 310	260 203	558 635
Value of construction work -----	1 998 433	(S)	18 124	39 368	162 946	168 278	244 105	318 153	264 618	256 376	522 461
Net value of construction work† -----	1 715 113	(S)	16 798	36 553	147 658	145 646	217 248	286 606	213 281	209 325	438 284
Value added†† -----	1 093 773	(S)	10 471	22 471	88 084	83 757	129 823	183 193	128 580	143 856	301 425
Cost of materials, components, supplies, and fuels -----	696 603	(S)	6 544	14 834	61 999	65 793	96 832	118 243	88 393	69 296	173 033
Cost of construction work subcontracted out to others -----	283 320	(S)	(S)	(S)	(S)	22 633	26 857	(S)	51 337	47 051	84 177
Rental cost for machinery, equipment, and buildings -----	36 630	(S)	(S)	248	3 215	2 822	4 254	4 879	6 764	6 679	7 313
Capital expenditures, other than land -----	48 532	(S)	(S)	914	4 628	3 992	5 751	7 840	7 453	4 901	12 654
End-of-year gross book value of depreciable assets -----	465 601	(S)	*3 706	5 370	36 141	31 300	40 543	61 596	80 078	63 975	142 370
1987											
All employees** -----	20 669	(S)	(S)	(S)	(S)	2 542	2 853	3 213	2 681	1 916	2 827
Value of construction work -----	1 440 174	(S)	(S)	(S)	(S)	140 591	177 122	276 506	218 135	176 301	280 525
Value added†† -----	825 347	(S)	(S)	(S)	(S)	72 775	100 639	153 025	127 296	105 842	172 560
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	14	13	9	11	9	6	3	(Z)	(Z)
Net value of construction work† -----	1	(S)	11	10	8	10	9	7	4	(Z)	(Z)
Capital expenditures, other than land -----	6	(S)	(S)	32	18	25	26	15	3	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

WV-10 WEST VIRGINIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 998 433	1 062 426	470 925	368 665	1	2	3	2
Building construction	1 091 422	630 458	312 313	148 651	3	4	4	4
Single-family houses	418 125	290 926	93 087	34 112	6	7	10	11
Single-family houses, detached	389 801	268 142	90 349	31 310	6	8	10	11
Single-family houses, attached, including townhouses and townhouse-type condominiums	28 324	22 784	2 738	(S)	16	18	28	(S)
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	18 473	6 744	9 253	2 476	17	18	30	10
Office buildings	84 941	42 594	29 625	12 722	8	8	11	22
Other commercial buildings such as stores, restaurants, and automobile service stations	131 927	67 859	43 485	20 583	7	12	8	12
Industrial buildings and warehouses	193 391	71 819	66 595	54 977	4	6	6	4
Industrial buildings	168 297	61 817	54 680	51 800	3	6	4	4
Warehouses	25 094	10 002	11 914	(S)	15	14	19	(S)
Religious buildings	17 233	(S)	8 055	3 234	11	(S)	15	15
Educational buildings	128 530	83 915	33 289	11 326	6	5	18	14
Hospitals and institutional buildings	71 320	45 737	20 538	5 045	6	7	8	5
Other nonresidential buildings	27 483	14 921	8 386	4 175	10	9	18	12
Nonbuilding construction	810 595	431 969	158 612	220 014	1	2	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	246 232	147 479	32 044	66 709	3	2	8	6
Private driveways and parking areas	(S)	(S)	*2 225	(S)	(S)	(S)	55	(S)
Bridges, tunnels, and elevated highways	56 646	47 094	3 385	6 168	1	(Z)	5	9
Conservation and development construction	47 635	30 918	4 328	12 389	11	12	20	24
Power and communication transmission lines, towers, and related facilities	34 361	17 468	8 248	(S)	17	22	20	(S)
Sewers, water mains, and related facilities	55 471	46 458	5 698	3 316	3	2	7	22
Sewers, sewer lines, septic systems, and related facilities	28 396	23 127	3 409	1 860	5	4	8	34
Water mains and related facilities	27 075	23 331	2 289	(S)	3	2	9	(S)
Pipeline construction other than sewer or water lines	88 275	61 332	18 794	8 150	2	3	1	1
Blast furnaces, petroleum refineries, chemical complexes, etc.	177 199	32 811	55 837	88 552	1	(Z)	2	2
Power plants	23 795	5 052	2 211	16 532	4	10	34	1
Sewage treatment and water treatment plants	20 762	16 489	2 475	1 799	1	(Z)	3	3
Other nonbuilding construction	47 891	18 816	23 368	5 707	11	20	4	33
Construction work, n.s.k.	96 416	(NA)	(NA)	(NA)	9	(NA)	(NA)	(NA)
1987								
Value of construction work	1 440 174	791 670	307 667	236 456	2	3	3	4
Building construction	736 216	414 848	216 743	102 110	3	5	4	5
Single-family houses	233 979	143 981	61 731	28 266	7	9	11	11
Single-family houses, detached	216 282	132 134	58 481	25 665	7	9	12	11
Single-family houses, attached, including townhouses and townhouse-type condominiums	17 697	11 846	*3 250	2 600	30	26	49	39
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	21 491	14 126	2 881	4 482	12	14	35	28
Office buildings	63 433	32 766	23 710	6 956	5	7	9	7
Other commercial buildings such as stores, restaurants, and automobile service stations	105 282	65 819	22 555	16 906	6	8	7	11
Industrial buildings and warehouses	163 426	70 482	60 256	32 687	5	8	5	9
Industrial buildings	143 410	56 091	55 815	31 503	6	10	5	9
Warehouses	20 016	14 390	4 440	1 184	8	10	15	16
Religious buildings	11 715	4 927	4 911	1 876	14	18	26	19
Educational buildings	63 739	45 151	14 825	3 762	23	32	16	19
Hospitals and institutional buildings	40 544	21 190	15 258	4 095	5	5	11	4
Other nonresidential buildings	32 607	18 180	10 877	3 556	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	599 578	375 047	90 661	133 869	2	2	3	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	200 395	116 069	29 375	54 950	3	3	2	6
Private driveways and parking areas	15 413	10 641	1 894	2 876	21	21	23	36
Bridges, tunnels, and elevated highways	44 901	(D)	(D)	(D)	7	(D)	(D)	(D)
Conservation and development construction	15 969	10 710	2 196	3 061	7	(Z)	37	16
Power and communication transmission lines, towers, and related facilities	26 167	11 449	6 981	7 737	14	24	20	22
Sewers, water mains, and related facilities	59 911	47 345	7 485	5 081	10	10	9	26
Sewers, sewer lines, septic systems, and related facilities	32 531	26 182	3 879	2 469	10	10	12	22
Water mains and related facilities	27 380	21 163	3 605	*2 611	17	17	8	45
Pipeline construction other than sewer or water lines	43 112	23 445	4 707	14 959	4	4	12	8
Blast furnaces, petroleum refineries, chemical complexes, etc.	95 757	64 639	16 015	15 102	2	2	3	6
Power plants	22 476	*1 750	5 772	14 954	11	73	32	3
Sewage treatment and water treatment plants	24 584	19 425	2 702	2 457	9	8	11	39
Other nonbuilding construction	50 893	(D)	(D)	(D)	19	(D)	(D)	(D)
Construction work, n.s.k.	104 378	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. **Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	3 595	20 244	16 843	20 637	22 459	21 038	1	1	2	1	2	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	1 031	2 506	2 173	2 529	2 807	2 514	4	7	7	7	7	7
1522	Other residential buildings -----	*28	*75	*37	*62	*105	*96	42	46	61	51	48	50
1531	Operative builders -----	116	273	279	277	320	216	17	21	22	19	23	24
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	69	564	506	576	567	606	25	13	12	14	14	12
1542	Nonresidential buildings, n.e.c. ----	194	1 615	1 277	1 587	1 941	1 654	14	8	8	9	9	9
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	78	1 871	1 289	2 168	2 117	1 908	13	2	3	2	2	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	6	119	80	115	147	132	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	89	1 470	1 229	1 379	1 593	1 679	15	3	3	3	3	5
1629	Heavy construction, n.e.c. -----	162	3 145	2 367	3 365	3 306	3 543	14	3	4	3	3	2
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	399	2 036	1 861	1 943	2 212	2 125	3	5	5	5	5	5
1721	Painting and paper hanging -----	95	262	210	269	330	240	15	22	26	22	19	21
1731	Electrical work -----	261	1 780	1 642	1 867	1 908	1 703	6	6	6	6	6	7
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	177	584	582	625	565	566	6	12	15	12	12	13
1742	Plastering, drywall, and insulation work -----	30	211	243	213	185	206	36	25	23	26	30	25
1743	Terrazzo, tile, marble, and mosaic work -----	7	28	25	28	28	29	22	24	26	24	24	23
175	Carpentry and floor work:												
1751	Carpentry -----	188	609	594	615	674	552	9	13	13	13	14	14
1752	Floor laying and other floor work --	34	87	68	77	108	94	6	9	12	11	7	8
1761	Roofing, siding, and sheet metal work -----	143	957	785	857	1 115	1 071	6	7	7	7	7	8
1771	Concrete work -----	123	544	342	494	739	601	10	14	16	13	14	18
1781	Water well drilling -----	46	88	79	83	94	94	16	27	29	28	25	25
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	22	187	159	181	211	197	17	24	33	28	25	20
1793	Glass and glazing work -----	16	67	66	64	74	65	(Z)	6	6	6	5	6
1794	Excavation work -----	153	457	362	482	478	506	14	16	16	19	17	16
1795	Wrecking and demolition work -----	3	(D)	9	9	(D)	(D)	(Z)	(D)	(Z)	(Z)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	18	144	120	131	173	151	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1799	Special trade contractors, n.e.c. ----	108	(D)	462	641	(D)	(D)	18	(D)	12	9	(D)	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	6.9	21.7	98.7	.271	.349	.142	.204	.018
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.0	13.4	88.1	.191	.415	(S)	.033	.008
1522	Other residential buildings -----	3.0	13.0	* 73.7	.198	.387	.156	(S)	(S)
1531	Operative builders -----	3.5	23.1	242.5	.142	.397	(S)	.004	.002
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	10.3	22.6	109.8	.258	.264	.216	.024	.011
1542	Nonresidential buildings, n.e.c. -----	10.5	22.5	138.1	.206	.233	.395	.025	.012
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	29.0	28.6	140.7	.248	.398	.196	.187	.030
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	23.3	40.8	230.4	.208	.360	.205	—	.022
1623	Water, sewer, and utility lines -----	20.0	31.4	104.9	.362	.204	.062	.048	.036
1629	Heavy construction, n.e.c. -----	23.1	22.9	82.6	.329	.389	.051	.224	.031
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	6.6	19.3	96.7	.260	.414	.071	.417	.011
1721	Painting and paper hanging -----	3.1	18.6	53.1	.393	(D)	.021	(D)	.029
1731	Electrical work -----	8.2	25.9	81.9	.382	.359	.014	.462	(S)
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1742	Plastering, drywall, and insulation work -----	8.3	22.5	74.1	.359	.256	* .131	.822	.027
1743	Terrazzo, tile, marble, and mosaic work -----	5.3	14.3	57.9	.326	(D)	.035	.084	* .037
175	Carpentry and floor work:								
1751	Carpentry -----	4.0	16.7	78.5	.264	.359	.086	.466	.013
1752	Floor laying and other floor work -----	3.3	13.6	52.7	.331	(D)	.111	.529	.009
1761	Roofing, siding, and sheet metal work -----	8.2	22.1	89.3	.303	.431	.023	.232	.011
1771	Concrete work -----	5.7	15.9	89.1	.230	.292	.116	(S)	(D)
1781	Water well drilling -----	2.2	13.3	86.9	.174	.445	.009	(S)	* .029
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	11.6	18.9	88.4	.287	.345	.072	.461	* .050
1793	Glass and glazing work -----	5.9	22.3	104.7	.303	.552	.024	.689	.011
1794	Excavation work -----	3.5	16.3	86.6	.224	.238	.055	(S)	.014
1795	Wrecking and demolition work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	9.4	25.5	89.9	.332	.449	.007	.187	.009
1799	Special trade contractors, n.e.c. -----	(D)	(D)	(D)	.400	.245	.054	.096	(D)

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	WASHINGTON-BALTIMORE, DC-MD-VA-WV CMSA											
15,16, 17	Construction industries	17 387	176 268	4 603 770	20 018 974	14 144 696	8 669 507	6 022 675	5 874 278	192 779	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	3 588	15 929	309 642	1 698 388	1 241 643	695 235	566 367	456 745	20 692	4	4
1522	Other residential buildings	226	1 477	36 166	276 579	138 249	97 076	45 215	138 329	847	9	27
1531	Operative builders	678	7 392	236 515	2 926 613	1 717 507	1 050 013	922 273	1 209 106	11 497	3	3
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	80	1 195	31 408	165 692	90 417	48 216	43 526	75 275	1 460	11	11
1542	Nonresidential buildings, n.e.c.	1 059	18 505	585 079	4 356 708	1 674 712	1 048 575	758 462	2 681 996	14 054	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	245	8 767	251 414	1 021 315	792 948	491 292	332 230	228 367	25 055	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	28	1 230	30 403	128 658	93 101	59 929	33 593	35 557	1 847	3	3
1623	Water, sewer, and utility lines	232	7 525	195 589	624 327	542 529	356 139	190 347	81 798	17 495	2	2
1629	Heavy construction, n.e.c.	252	7 451	302 916	914 799	681 091	437 734	252 784	233 708	9 634	2	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	2 187	24 142	675 399	2 221 471	1 903 537	1 111 170	813 141	317 934	24 730	1	1
1721	Painting and paper hanging	1 034	6 502	127 442	311 669	286 571	209 593	78 866	25 098	3 125	5	4
1731	Electrical work	1 621	18 541	512 527	1 475 819	1 429 858	841 135	606 962	45 961	17 122	2	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	794	7 256	137 152	351 135	334 418	206 847	129 792	16 717	5 647	3	3
1742	Plastering, drywall, and insulation work	547	8 514	218 153	556 510	496 262	322 717	175 708	60 248	6 108	3	2
1743	Terrazzo, tile, marble, and mosaic work	193	1 107	27 990	77 320	75 029	42 743	32 750	2 291	*623	8	7
175	Carpentry and floor work:											
1751	Carpentry	1 287	7 068	137 931	418 740	356 845	223 581	136 642	61 895	4 777	5	5
1752	Floor laying and other floor work	342	1 951	46 253	196 556	178 225	82 497	99 330	18 331	1 344	6	6
1761	Roofing, siding, and sheet metal work	790	7 361	172 130	484 263	455 997	272 976	186 542	28 266	4 393	3	3
1771	Concrete work	771	8 849	182 629	650 557	590 618	337 123	256 713	59 939	10 278	3	2
1781	Water well drilling	45	420	11 647	35 350	35 127	23 589	11 566	(S)	1 160	4	6
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	77	1 420	43 891	120 697	112 610	72 141	41 465	8 087	2 505	7	6
1793	Glass and glazing work	121	1 090	28 351	86 542	83 848	44 209	41 570	2 693	311	6	5
1794	Excavation work	417	2 874	71 092	244 695	211 045	162 126	62 327	33 649	3 288	7	6
1795	Wrecking and demolition work	33	631	13 288	44 454	40 376	32 910	9 327	4 078	842	4	3
1796	Installing building equipment, n.e.c.	105	3 067	89 574	272 269	262 072	187 194	78 227	10 198	1 040	2	3
1799	Special trade contractors, n.e.c.	635	6 003	129 189	357 849	320 061	212 747	116 949	37 788	2 904	5	4
	Baltimore, MD PMSA											
15,16, 17	Construction industries	6 647	59 167	1 447 718	6 196 218	4 592 118	2 854 549	1 975 464	1 604 100	74 913	1	1
	(See appropriate State for SIC detail.)											
	Hagerstown, MD PMSA											
15,16, 17	Construction industries	347	3 026	65 872	283 106	206 110	114 847	98 262	76 996	3 806	5	5
	(See appropriate State for SIC detail.)											

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	WASHINGTON-BALTIMORE, DC-MD-VA-WV CMSA—Con.											
	Washington, DC-MD-VA-WV PMSA											
15,16,17	Construction industries	10 393	114 075	3 090 179	13 539 649	9 346 467	5 700 111	3 948 948	4 193 182	114 060	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	2 093	9 503	192 733	965 039	696 093	374 061	334 635	268 947	10 749	5	6
1522	Other residential buildings	142	1 016	25 381	209 532	99 368	67 967	34 552	110 164	523	9	37
1531	Operative builders	452	5 377	173 629	2 104 677	1 228 742	702 215	693 870	875 935	8 651	3	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	45	471	15 366	96 313	47 475	32 419	(D)	48 838	884	24	19
1542	Nonresidential buildings, n.e.c.	667	13 705	445 460	3 244 455	1 261 505	805 537	495 454	1 982 950	10 441	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	145	4 973	144 149	583 830	457 271	283 120	188 816	126 559	10 146	3	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	*10	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	162	5 245	129 511	424 257	369 281	249 331	122 119	54 976	12 942	3	2
1629	Heavy construction, n.e.c.	(S)	5 450	243 005	656 246	(D)	312 991	157 161	(D)	(D)	2	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 350	15 257	438 623	1 422 452	1 204 782	703 226	516 565	217 671	15 393	2	1
1721	Painting and paper hanging	637	4 279	81 944	198 314	179 801	134 149	46 864	18 513	1 493	6	4
1731	Electrical work	975	11 920	339 994	1 000 035	965 642	564 687	414 826	34 393	10 450	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	471	4 693	88 901	226 767	217 210	131 892	86 872	9 557	4 500	4	4
1742	Plastering, drywall, and insulation work	338	5 597	147 063	373 788	332 416	215 892	118 267	41 372	4 752	4	2
1743	Terrazzo, tile, marble, and mosaic work	131	846	21 602	62 044	59 951	33 638	26 768	2 093	(D)	9	7
175	Carpentry and floor work:											
1751	Carpentry	731	4 103	86 552	264 674	223 856	134 998	89 399	40 817	2 756	5	6
1752	Floor laying and other floor work	201	1 334	(D)	145 145	130 936	61 117	73 373	14 210	860	6	7
1761	Roofing, siding, and sheet metal work	409	4 396	109 476	300 776	283 762	170 788	114 107	17 014	2 404	3	3
1771	Concrete work	473	5 648	110 931	421 305	376 635	212 667	166 998	44 670	5 838	3	3
1781	Water well drilling	21	(D)	(D)	(D)	(D)	(D)	5 588	(D)	526	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	43	786	22 353	60 827	55 808	37 994	(D)	5 019	(S)	10	10
1793	Glass and glazing work	82	750	21 023	63 211	61 434	33 976	29 388	1 777	(D)	8	7
1794	Excavation work	250	1 877	44 243	166 462	140 273	105 750	44 452	26 190	1 910	9	8
1795	Wrecking and demolition work	10	167	3 707	(D)	(D)	12 724	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c.	52	2 399	68 420	210 083	204 030	143 129	60 901	6 053	870	3	4
1799	Special trade contractors, n.e.c.	369	3 659	85 383	239 475	211 441	138 336	78 984	28 035	(D)	6	5

CONSTRUCTION—GEOGRAPHIC AREA SERIES

WEST VIRGINIA WV—15

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/ structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Appendix D. Metropolitan Areas

[Titles and definitions shown for MSA's, CMSA's, and PMSA's are those established by the Office of Management and Budget as of June 30, 1993]

Abilene, TX MSA

Taylor County, TX

Akron, OH PMSA—see Cleveland–Akron, OH CMSA

Albany, GA MSA

Dougherty County, GA
Lee County, GA

Albany–Schenectady–Troy, NY MSA

Albany County, NY
Montgomery County, NY
Rensselaer County, NY
Saratoga County, NY
Schenectady County, NY
Schoharie County, NY

Albuquerque, NM MSA

Bernalillo County, NM
Sandoval County, NM
Valencia County, NM

Alexandria, LA MSA

Rapides Parish, LA

Allentown–Bethlehem–Easton, PA MSA

Carbon County, PA
Lehigh County, PA
Northampton County, PA

Altoona, PA MSA

Blair County, PA

Amarillo, TX MSA

Potter County, TX
Randall County, TX

Anchorage, AK MSA

Anchorage Borough, AK

Ann Arbor, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Anniston, AL MSA

Calhoun County, AL

Appleton–Oshkosh–Neenah, WI MSA

Calumet County, WI
Outagamie County, WI
Winnebago County, WI

Asheville, NC MSA

Buncombe County, NC
Madison County, NC

Athens, GA MSA

Clarke County, GA
Madison County, GA
Oconee County, GA

Atlanta, GA MSA

Barrow County, GA
Bartow County, GA

Atlanta, GA MSA—Con.

Carroll County, GA
Cherokee County, GA
Clayton County, GA
Cobb County, GA
Coweta County, GA
DeKalb County, GA
Douglas County, GA
Fayette County, GA
Forsyth County, GA
Fulton County, GA
Gwinnett County, GA
Henry County, GA
Newton County, GA
Paulding County, GA
Pickens County, GA
Rockdale County, GA
Spalding County, GA
Walton County, GA

Atlantic–Cape May, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Augusta–Aiken, GA–SC MSA

Columbia County, GA
McDuffie County, GA
Richmond County, GA
Aiken County, SC
Edgefield County, SC

Austin–San Marcos, TX MSA

Bastrop County, TX
Caldwell County, TX
Hays County, TX
Travis County, TX
Williamson County, TX

Bakersfield, CA MSA

Kern County, CA

Baltimore, MD PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA

Bangor, ME MSA

Penobscot County, ME (part)
Bangor city, ME
Brewer city, ME
Eddington town, ME
Glenburn town, ME
Hampden town, ME
Hermon town, ME
Holden town, ME
Kenduskeag town, ME
Milford town, ME
Old Town city, ME
Orono town, ME
Orrington town, ME
Penobscot Indian Island Reservation, ME
Veazie town, ME

Bangor, ME MSA—Con.

Waldo County, ME (part)
Winterport town, ME

Barnstable–Yarmouth, MA MSA

Barnstable County, MA (part)
Barnstable city, MA
Brewster town, MA
Chatham town, MA
Dennis town, MA
Eastham town, MA
Harwich town, MA
Mashpee town, MA
Orleans town, MA
Sandwich town, MA
Yarmouth town, MA

Baton Rouge, LA MSA

Ascension Parish, LA
East Baton Rouge Parish, LA
Livingston Parish, LA
West Baton Rouge Parish, LA

Beaumont–Port Arthur, TX MSA

Hardin County, TX
Jefferson County, TX
Orange County, TX

Bellingham, WA MSA

Whatcom County, WA

Benton Harbor, MI MSA

Berrien County, MI

Bergen–Passaic, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Billings, MT MSA

Yellowstone County, MT

Biloxi–Gulfport–Pascagoula, MS MSA

Hancock County, MS
Harrison County, MS
Jackson County, MS

Binghamton, NY MSA

Broome County, NY
Tioga County, NY

Birmingham, AL MSA

Blount County, AL
Jefferson County, AL
St. Clair County, AL
Shelby County, AL

Bismarck, ND MSA

Burleigh County, ND
Morton County, ND

Bloomington, IN MSA

Monroe County, IN

Bloomington–Normal, IL MSA

McLean County, IL

Boise City, ID MSA

Ada County, ID

Canyon County, ID

**Boston, MA–NH PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA**

Boston, MA–NH PMSA

Bristol County, MA (part)

Berkley town, MA

Dighton town, MA

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Essex town, MA

Gloucester city, MA

Hamilton town, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Manchester town, MA

Marblehead town, MA

Middleton town, MA

Nahant town, MA

Newbury town, MA

Newburyport city, MA

Peabody city, MA

Rockport town, MA

Rowley town, MA

Salem city, MA

Salisbury town, MA

Saugus town, MA

Swampscott town, MA

Topsfield town, MA

Wenham town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Holliston town, MA

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Lincoln town, MA

Littleton town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Sherborn town, MA

Shirley town, MA

Somerville city, MA

Stoneham town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Middlesex County, MA (part)

Stow town, MA

Sudbury town, MA

Townsend town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

Winchester town, MA

Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Cohasset town, MA

Dedham town, MA

Dover town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Millis town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Plainville town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Norwell town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

Suffolk County, MA

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA

Blackstone town, MA

Bolton town, MA

Harvard town, MA

Hopedale town, MA

Lancaster town, MA

Mendon town, MA

Milford town, MA

Millville town, MA

Southborough town, MA

Upton town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Rockingham County, NH (part)

Seabrook town, NH

South Hampton town, NH

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Halifax town, MA

Hanson town, MA

Lakeville town, MA

Middleborough town, MA

Plympton town, MA

West Bridgewater town, MA

Whitman town, MA

Fitchburg–Leominster, MA PMSA

Middlesex County, MA (part)

Ashby town, MA

Worcester County, MA (part)

Ashburnham town, MA

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lunenburg town, MA

Templeton town, MA

Westminster town, MA

Winchendon town, MA

Lawrence, MA–NH PMSA

Essex County, MA (part)

Andover town, MA

Boxford town, MA

Georgetown town, MA

Groveland town, MA

Haverhill city, MA

Lawrence city, MA

Merrimac town, MA

Methuen city, MA

North Andover town, MA

West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH

Chester town, NH

Danville town, NH

Derry town, NH

Fremont town, NH

Hampstead town, NH

Kingston town, NH

Newton town, NH

Plaistow town, NH

Raymond town, NH

Salem town, NH

Sandown town, NH

Windham town, NH

Lowell, MA–NH PMSA

Middlesex County, MA (part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Dunstable town, MA

Groton town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Tyngsborough town, MA

Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Manchester, NH PMSA
 Hillsborough County, NH (part)
 Bedford town, NH
 Goffstown town, NH
 Manchester city, NH
 Weare town, NH
 Merrimack County, NH (part)
 Allentown town, NH
 Hooksett town, NH
 Rockingham County, NH (part)
 Auburn town, NH
 Candia town, NH
 Londonderry town, NH
 Nashua, NH PMSA
 Hillsborough County, NH (part)
 Amherst town, NH
 Brookline town, NH
 Greenville town, NH
 Hollis town, NH
 Hudson town, NH
 Litchfield town, NH
 Mason town, NH
 Merrimack town, NH
 Milford town, NH
 Mont Vernon town, NH
 Nashua city, NH
 New Ipswich town, NH
 Wilton town, NH
 New Bedford, MA PMSA
 Bristol County, MA (part)
 Acushnet town, MA
 Dartmouth town, MA
 Fairhaven town, MA
 Freetown town, MA
 New Bedford city, MA
 Plymouth County, MA (part)
 Marion town, MA
 Mattapoisett town, MA
 Rochester town, MA
 Portsmouth–Rochester, NH–ME PMSA
 York County, ME (part)
 Berwick town, ME
 Eliot town, ME
 Kittery town, ME
 South Berwick town, ME
 York town, ME
 Rockingham County, NH (part)
 Brentwood town, NH
 East Kingston town, NH
 Epping town, NH
 Exeter town, NH
 Greenland town, NH
 Hampton town, NH
 Hampton Falls town, NH
 Kensington town, NH
 New Castle town, NH
 Newfields town, NH
 Newington town, NH
 Newmarket town, NH
 North Hampton town, NH
 Portsmouth city, NH
 Rye town, NH
 Stratham town, NH
 Strafford County, NH (part)
 Barrington town, NH
 Dover city, NH
 Durham town, NH
 Farmington town, NH
 Lee town, NH
 Madbury town, NH
 Milton town, NH
 Rochester city, NH
 Rollinsford town, NH
 Somersworth city, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Worcester, MA–CT PMSA
 Windham County, CT (part)
 Thompson town, CT
 Hampden County, MA (part)
 Holland town, MA
 Worcester County, MA (part)
 Auburn town, MA
 Barre town, MA
 Boylston town, MA
 Brookfield town, MA
 Charlton town, MA
 Clinton town, MA
 Douglas town, MA
 Dudley town, MA
 East Brookfield town, MA
 Grafton town, MA
 Holden town, MA
 Leicester town, MA
 Millbury town, MA
 Northborough town, MA
 Northbridge town, MA
 North Brookfield town, MA
 Oakham town, MA
 Oxford town, MA
 Paxton town, MA
 Princeton town, MA
 Rutland town, MA
 Shrewsbury town, MA
 Southbridge town, MA
 Spencer town, MA
 Sterling town, MA
 Sturbridge town, MA
 Sutton town, MA
 Uxbridge town, MA
 Webster town, MA
 Westborough town, MA
 West Boylston town, MA
 West Brookfield town, MA
 Worcester city, MA

**Boulder–Longmont, CO PMSA—see
Denver–Boulder–Greeley, CO CMSA****Brazoria, TX PMSA—see Houston–
Galveston–Brazoria, TX CMSA****Bremerton, WA PMSA—see Seattle–
Tacoma–Bremerton, WA CMSA****Bridgeport, CT PMSA—see New York–
Northern New Jersey–Long Island, NY–
NJ–CT–PA CMSA****Brockton, MA PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Brownsville–Harlingen–San Benito, TX MSA**
Cameron County, TX**Bryan–College Station, TX MSA**
Brazos County, TX**Buffalo–Niagara Falls, NY MSA**
Erie County, NY
Niagara County, NY

Burlington, VT MSA
 Chittenden County, VT (part)
 Burlington city, VT
 Charlotte town, VT
 Colchester town, VT
 Essex Junction village, VT
 Essex town balance, VT
 Hinesburg town, VT
 Jericho town, VT
 Jericho village, VT
 Milton town, VT
 Milton village, VT
 Richmond town, VT
 St. George town, VT
 Shelburne town, VT

Burlington, VT MSA—Con.
 Chittenden County, VT (part)—Con.
 South Burlington city, VT
 Williston town, VT
 Winooski city, VT
 Franklin County, VT (part)
 Fairfax town, VT
 Georgia town, VT
 St. Albans city, VT
 St. Albans town, VT
 Swanton town, VT
 Swanton village, VT
 Grand Isle County, VT (part)
 Grand Isle town, VT
 South Hero town, VT

Canton–Massillon, OH MSA
Carroll County, OH
Stark County, OH**Casper, WY MSA**
Natrona County, WY**Cedar Rapids, IA MSA**
Linn County, IA**Champaign–Urbana, IL MSA**
Champaign County, IL**Charleston–North Charleston, SC MSA**
Berkeley County, SC
Charleston County, SC
Dorchester County, SC**Charleston, WV MSA**
Kanawha County, WV
Putnam County, WV**Charlotte–Gastonia–Rock Hill, NC–SC MSA**
Cabarrus County, NC
Gaston County, NC
Lincoln County, NC
Mecklenburg County, NC
Rowan County, NC
Union County, NC
York County, SC**Charlottesville, VA MSA**
Albemarle County, VA
Fluvanna County, VA
Greene County, VA
Charlottesville city, VA**Chattanooga, TN–GA MSA**
Catoosa County, GA
Dade County, GA
Walker County, GA
Hamilton County, TN
Marion County, TN**Cheyenne, WY MSA**
Laramie County, WY**Chicago, IL PMSA—see Chicago–Gary–
Kenosha, IL–IN–WI CMSA**

Chicago–Gary–Kenosha, IL–IN–WI CMSA
 Chicago, IL PMSA
 Cook County, IL
 DeKalb County, IL
 DuPage County, IL
 Grundy County, IL
 Kane County, IL
 Kendall County, IL
 Lake County, IL
 McHenry County, IL
 Will County, IL
 Gary, IN PMSA
 Lake County, IN
 Porter County, IN
 Kankakee, IL PMSA
 Kankakee County, IL

Chicago–Gary–Kenosha, IL–IN–WI CMSA—Con.

Kenosha, WI PMSA
Kenosha County, WI

Chico–Paradise, CA MSA

Butte County, CA

Cincinnati, OH–KY–IN PMSA—see

Cincinnati–Hamilton, OH–KY–IN CMSA

Cincinnati–Hamilton, OH–KY–IN CMSA

Cincinnati, OH–KY–IN PMSA
Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH
Hamilton–Middletown, OH PMSA
Butler County, OH

Clarksville–Hopkinsville, TN–KY MSA

Christian County, KY
Montgomery County, TN

Cleveland–Lorain–Elyria, OH PMSA—see

Cleveland–Akron, OH CMSA

Cleveland–Akron, OH CMSA

Akron, OH PMSA
Portage County, OH
Summit County, OH
Cleveland–Lorain–Elyria, OH PMSA
Ashtabula County, OH
Cuyahoga County, OH
Geauga County, OH
Lake County, OH
Lorain County, OH
Medina County, OH

Colorado Springs, CO MSA

El Paso County, CO

Columbia, MO MSA

Boone County, MO

Columbia, SC MSA

Lexington County, SC
Richland County, SC

Columbus, GA–AL MSA

Russell County, AL
Chattahoochee County, GA
Harris County, GA
Muscooke County, GA

Columbus, OH MSA

Delaware County, OH
Fairfield County, OH
Franklin County, OH
Licking County, OH
Madison County, OH
Pickaway County, OH

Corpus Christi, TX MSA

Nueces County, TX
San Patricio County, TX

Cumberland, MD–WV MSA

Allegany County, MD
Mineral County, WV

Dallas, TX PMSA—see Dallas–Fort Worth, TX CMSA

Dallas–Fort Worth, TX CMSA

Dallas, TX PMSA
Collin County, TX
Dallas County, TX
Denton County, TX
Ellis County, TX
Henderson County, TX
Hunt County, TX
Kaufman County, TX
Rockwall County, TX
Fort Worth–Arlington, TX PMSA
Hood County, TX
Johnson County, TX
Parker County, TX
Tarrant County, TX

Danbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Danville, VA MSA

Pittsylvania County, VA
Danville city, VA

Davenport–Moline–Rock Island, IA–IL MSA

Henry County, IL
Rock Island County, IL
Scott County, IA

Dayton–Springfield, OH MSA

Clark County, OH
Greene County, OH
Miami County, OH
Montgomery County, OH

Daytona Beach, FL MSA

Flagler County, FL
Volusia County, FL

Decatur, AL MSA

Lawrence County, AL
Morgan County, AL

Decatur, IL MSA

Macon County, IL

Denver, CO PMSA—see Denver–Boulder–Greeley, CO CMSA

Denver–Boulder–Greeley, CO CMSA

Boulder–Longmont, CO PMSA
Boulder County, CO
Denver, CO PMSA
Adams County, CO
Arapahoe County, CO
Denver County, CO
Douglas County, CO
Jefferson County, CO
Greeley, CO PMSA
Weld County, CO

Des Moines, IA MSA

Dallas County, IA
Polk County, IA
Warren County, IA

Detroit, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Detroit–Ann Arbor–Flint, MI CMSA

Ann Arbor, MI PMSA
Lenawee County, MI
Livingston County, MI
Washtenaw County, MI
Detroit, MI PMSA
Lapeer County, MI
Macomb County, MI
Monroe County, MI
Oakland County, MI
St. Clair County, MI
Wayne County, MI

Detroit–Ann Arbor–Flint, MI CMSA—Con.

Flint, MI PMSA
Genesee County, MI

Dothan, AL MSA

Dale County, AL
Houston County, AL

Dover, DE MSA

Kent County, DE

Dubuque, IA MSA

Dubuque County, IA

Duluth–Superior, MN–WI MSA

St. Louis County, MN
Douglas County, WI

Dutchess County, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Eau Claire, WI MSA

Chippewa County, WI
Eau Claire County, WI

El Paso, TX MSA

El Paso County, TX

Elkhart–Goshen, IN MSA

Elkhart County, IN

Elmira, NY MSA

Chemung County, NY

Enid, OK MSA

Garfield County, OK

Erie, PA MSA

Erie County, PA

Eugene–Springfield, OR MSA

Lane County, OR

Evansville–Henderson, IN–KY MSA

Posey County, IN
Vanderburgh County, IN
Warrick County, IN
Henderson County, KY

Fargo–Moorhead, ND–MN MSA

Clay County, MN
Cass County, ND

Fayetteville, NC MSA

Cumberland County, NC

Fayetteville–Springdale–Rogers, AR MSA

Benton County, AR
Washington County, AR

Fitchburg–Leominster, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Flint, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Florence, AL MSA

Colbert County, AL
Lauderdale County, AL

Florence, SC MSA

Florence County, SC

Fort Collins–Loveland, CO MSA

Larimer County, CO

Fort Lauderdale, FL PMSA—see Miami–Fort Lauderdale, FL CMSA

Fort Myers–Cape Coral, FL MSA

Lee County, FL

Fort Pierce–Port St. Lucie, FL MSA

Martin County, FL
St. Lucie County, FL

Fort Smith, AR—OK MSA

Crawford County, AR
Sebastian County, AR
Sequoyah County, OK

Fort Walton Beach, FL MSA

Okaloosa County, FL

Fort Wayne, IN MSA

Adams County, IN
Allen County, IN
De Kalb County, IN
Huntington County, IN
Wells County, IN
Whitley County, IN

Fort Worth—Arlington, TX PMSA—see

Dallas—Fort Worth, TX CMSA

Fresno, CA MSA

Fresno County, CA
Madera County, CA

Gadsden, AL MSA

Etowah County, AL

Gainesville, FL MSA

Alachua County, FL

**Galveston—Texas City, TX PMSA—see
Houston—Galveston—Brazoria, TX CMSA****Gary, IN PMSA—see Chicago—Gary—
Kenosha, IL—IN—WI CMSA****Glens Falls, NY MSA**

Warren County, NY
Washington County, NY

Goldsboro, NC MSA

Wayne County, NC

Grand Forks, ND—MN MSA

Polk County, MN
Grand Forks County, ND

Grand Rapids—Muskegon—Holland, MI MSA

Allegan County, MI
Kent County, MI
Muskegon County, MI
Ottawa County, MI

Great Falls, MT MSA

Cascade County, MT

**Greeley, CO PMSA—see Denver—Boulder—
Greeley, CO CMSA****Green Bay, WI MSA**

Brown County, WI

**Greensboro—Winston-Salem—High Point, NC
MSA**

Alamance County, NC
Davidson County, NC
Davie County, NC
Forsyth County, NC
Guilford County, NC
Randolph County, NC
Stokes County, NC
Yadkin County, NC

Greenville, NC MSA

Pitt County, NC

Greenville—Spartanburg—Anderson, SC MSA

Anderson County, SC
Cherokee County, SC
Greenville County, SC
Pickens County, SC
Spartanburg County, SC

**Hagerstown, MD PMSA—see Washington—
Baltimore, DC—MD—VA—WV CMSA****Hamilton—Middletown, OH PMSA—see
Cincinnati—Hamilton, OH—KY—IN CMSA****Harrisburg—Lebanon—Carlisle, PA MSA**

Cumberland County, PA
Dauphin County, PA
Lebanon County, PA
Perry County, PA

Hartford, CT MSA

Hartford County, CT (part)
Avon town, CT
Berlin town, CT
Bloomfield town, CT
Bristol city, CT
Burlington town, CT
Canton town, CT
East Granby town, CT
East Hartford town, CT
East Windsor town, CT
Enfield town, CT
Farmington town, CT
Glastonbury town, CT
Granby town, CT
Hartford city, CT
Manchester town, CT
Marlborough town, CT
New Britain city, CT
Newington town, CT
Plainville town, CT
Rocky Hill town, CT
Simsbury town, CT
Southington town, CT
South Windsor town, CT
Suffield town, CT
West Hartford town, CT
Wethersfield town, CT
Windsor town, CT
Windsor Locks town, CT

Litchfield County, CT (part)
Barkhamsted town, CT
Harwinton town, CT
New Hartford town, CT
Plymouth town, CT
Winchester town, CT

Middlesex County, CT (part)
Cromwell town, CT
Durham town, CT
East Haddam town, CT
East Hampton town, CT
Haddam town, CT
Middlefield town, CT
Middletown city, CT
Portland town, CT

New London County, CT (part)
Colchester town, CT
Lebanon town, CT

Tolland County, CT (part)
Andover town, CT
Bolton town, CT
Columbia town, CT
Coventry town, CT
Ellington town, CT
Hebron town, CT
Mansfield town, CT
Somers town, CT
Stafford town, CT
Tolland town, CT
Vernon town, CT
Willington town, CT

Windham County, CT (part)
Ashford town, CT
Chaplin town, CT
Windham town, CT

Hickory—Morganton, NC MSA

Alexander County, NC
Burke County, NC
Caldwell County, NC
Catawba County, NC

Honolulu, HI MSA

Honolulu County, HI

Houma, LA MSA

Lafourche Parish, LA
Terrebonne Parish, LA

**Houston, TX PMSA—see Houston—Galveston—
Brazoria, TX CMSA****Houston—Galveston—Brazoria, TX CMSA**

Brazoria, TX PMSA
Brazoria County, TX
Galveston—Texas City, TX PMSA
Galveston County, TX
Houston, TX PMSA
Chambers County, TX
Fort Bend County, TX
Harris County, TX
Liberty County, TX
Montgomery County, TX
Waller County, TX

Huntington—Ashland, WV—KY—OH MSA

Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Huntsville, AL MSA

Limestone County, AL
Madison County, AL

Indianapolis, IN MSA

Boone County, IN
Hamilton County, IN
Hancock County, IN
Hendricks County, IN
Johnson County, IN
Madison County, IN
Marion County, IN
Morgan County, IN
Shelby County, IN

Iowa City, IA MSA

Johnson County, IA

Jackson, MI MSA

Jackson County, MI

Jackson, MS MSA

Hinds County, MS
Madison County, MS
Rankin County, MS

Jackson, TN MSA

Madison County, TN

Jacksonville, FL MSA

Clay County, FL
Duval County, FL
Nassau County, FL
St. Johns County, FL

Jacksonville, NC MSA

Onslow County, NC

Jamestown, NY MSA

Chautauqua County, NY

Janesville—Beloit, WI MSA

Rock County, WI

Jersey City, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Johnson City—Kingsport—Bristol, TN—VA MSA

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol city, VA

Johnstown, PA MSA

Cambria County, PA
Somerset County, PA

Joplin, MO MSA

Jasper County, MO
Newton County, MO

Kalamazoo—Battle Creek, MI MSA

Calhoun County, MI
Kalamazoo County, MI
Van Buren County, MI

Kankakee, IL PMSA—see Chicago—Gary—Kenosha, IL—IN—WI CMSA

Kansas City, MO—KS MSA

Johnson County, KS
Leavenworth County, KS
Miami County, KS
Wyandotte County, KS
Cass County, MO
Clay County, MO
Clinton County, MO
Jackson County, MO
Lafayette County, MO
Platte County, MO
Ray County, MO

Kenosha, WI PMSA—see Chicago—Gary—Kenosha, IL—IN—WI CMSA

Killeen—Temple, TX MSA

Bell County, TX
Coryell County, TX

Knoxville, TN MSA

Anderson County, TN
Blount County, TN
Knox County, TN
Loudon County, TN
Sevier County, TN
Union County, TN

Kokomo, IN MSA

Howard County, IN
Tipton County, IN

La Crosse, WI—MN MSA

Houston County, MN
La Crosse County, WI

Lafayette, LA MSA

Acadia Parish, LA
Lafayette Parish, LA
St. Landry Parish, LA
St. Martin Parish, LA

Lafayette, IN MSA

Clinton County, IN
Tippecanoe County, IN

Lake Charles, LA MSA

Calcasieu Parish, LA

Lakeland—Winter Haven, FL MSA

Polk County, FL

Lancaster, PA MSA

Lancaster County, PA

Lansing—East Lansing, MI MSA

Clinton County, MI
Eaton County, MI
Ingham County, MI

Laredo, TX MSA

Webb County, TX

Las Cruces, NM MSA

Dona Ana County, NM

Las Vegas, NV—AZ MSA

Mohave County, AZ
Clark County, NV
Nye County, NV

Lawrence, KS MSA

Douglas County, KS

Lawrence, MA—NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Lawton, OK MSA

Comanche County, OK

Lewiston—Auburn, ME MSA

Androscoggin County, ME (part)
Auburn city, ME
Greene town, ME
Lewiston city, ME
Lisbon town, ME
Mechanic Falls town, ME
Poland town, ME
Sabattus town, ME
Turner town, ME
Wales town, ME

Lexington, KY MSA

Bourbon County, KY
Clark County, KY
Fayette County, KY
Jessamine County, KY
Madison County, KY
Scott County, KY
Woodford County, KY

Lima, OH MSA

Allen County, OH
Auglaize County, OH

Lincoln, NE MSA

Lancaster County, NE

Little Rock—North Little Rock, AR MSA

Faulkner County, AR
Lonoke County, AR
Pulaski County, AR
Saline County, AR

Longview—Marshall, TX MSA

Gregg County, TX
Harrison County, TX
Upshur County, TX

Los Angeles—Riverside—Orange County, CA CMSA

Los Angeles—Long Beach, CA PMSA
Los Angeles County, CA
Orange County, CA PMSA
Orange County, CA
Riverside—San Bernardino, CA PMSA
Riverside County, CA
San Bernardino County, CA
Ventura, CA PMSA
Ventura County, CA

Los Angeles—Long Beach, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Louisville, KY—IN MSA

Clark County, IN
Floyd County, IN
Harrison County, IN
Scott County, IN
Bullitt County, KY
Jefferson County, KY
Oldham County, KY

Lowell, MA—NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Lubbock, TX MSA

Lubbock County, TX

Lynchburg, VA MSA

Amherst County, VA
Bedford County, VA
Campbell County, VA
Bedford city, VA
Lynchburg city, VA

Macon, GA MSA

Bibb County, GA
Houston County, GA
Jones County, GA
Peach County, GA
Twiggs County, GA

Madison, WI MSA

Dane County, WI

Manchester, NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Mansfield, OH MSA

Crawford County, OH
Richland County, OH

McAllen—Edinburg—Mission, TX MSA

Hidalgo County, TX

Medford—Ashland, OR MSA

Jackson County, OR

Melbourne—Titusville—Palm Bay, FL MSA

Brevard County, FL

Memphis, TN—AR—MS MSA

Crittenden County, AR
DeSoto County, MS
Fayette County, TN
Shelby County, TN
Tipton County, TN

Merced, CA MSA

Merced County, CA

Miami—Fort Lauderdale, FL CMSA

Fort Lauderdale, FL PMSA
Broward County, FL
Miami, FL PMSA
Dade County, FL

Miami, FL PMSA—see Miami—Fort Lauderdale, FL CMSA

Middlesex—Somerset—Hunterdon, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Milwaukee—Waukesha, WI PMSA—see Milwaukee—Racine, WI CMSA

Milwaukee—Racine, WI CMSA

Milwaukee—Waukesha, WI PMSA
Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI

Milwaukee–Racine, WI CMSA—Con.

Racine, WI PMSA
Racine County, WI

Minneapolis–St. Paul, MN–WI MSA

Anoka County, MN
Carver County, MN
Chisago County, MN
Dakota County, MN
Hennepin County, MN
Isanti County, MN
Ramsey County, MN
Scott County, MN
Sherburne County, MN
Washington County, MN
Wright County, MN
Pierce County, WI
St. Croix County, WI

Mobile, AL MSA

Baldwin County, AL
Mobile County, AL

Modesto, CA MSA

Stanislaus County, CA

Monmouth–Ocean, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Monroe, LA MSA**

Ouachita Parish, LA

Montgomery, AL MSA

Autauga County, AL
Elmore County, AL
Montgomery County, AL

Muncie, IN MSA

Delaware County, IN

Myrtle Beach, SC MSA

Horry County, SC

Naples, FL MSA

Collier County, FL

Nashua, NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Nashville, TN MSA**

Cheatham County, TN
Davidson County, TN
Dickson County, TN
Robertson County, TN
Rutherford County, TN
Sumner County, TN
Williamson County, TN
Wilson County, TN

Nassau–Suffolk, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New Bedford, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****New Haven–Meriden, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New London–Norwich, CT–RI MSA**

Middlesex County, CT (part)
Fenwick borough, CT
Old Saybrook town, CT
New London County, CT (part)
Bozrah town, CT
East Lyme town, CT
Franklin town, CT
Griswold town balance, CT
Groton city, CT
Groton town balance, CT

New London–Norwich, CT–RI MSA—Con.

New London County, CT (part)—Con.
Groton Long Point borough, CT
Jewett City borough, CT
Ledyard town, CT
Lisbon town, CT
Montville town, CT
New London city, CT
North Stonington town, CT
Norwich city, CT
Old Lyme town, CT
Preston town, CT
Salem town, CT
Sprague town, CT
Stonington borough, CT
Stonington town, CT
Waterford town, CT
Windham County, CT (part)
Canterbury town, CT
Plainfield town, CT
Washington County, RI (part)
Hopkinton town, RI
Westerly town, RI

New Orleans, LA MSA

Jefferson Parish, LA
Orleans Parish, LA
Plaquemines Parish, LA
St. Bernard Parish, LA
St. Charles Parish, LA
St. James Parish, LA
St. John the Baptist Parish, LA
St. Tammany Parish, LA

New York, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**

Bergen–Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (part)
Bridgeport city, CT
Easton town, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (part)
Ansonia city, CT
Beacon Falls town, CT
Derby city, CT
Milford city (balance), CT
Oxford town, CT
Seymour town, CT
Woodmont borough, CT
Danbury, CT PMSA
Fairfield County, CT (part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown borough, CT
Newtown town, CT
Redding town, CT
Ridgefield town, CT
Sherman town, CT
Litchfield County, CT (part)
Bridgewater town, CT
New Milford town, CT
Roxbury town, CT
Washington town, CT
Dutchess County, NY PMSA
Dutchess County, NY

New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA—Con.

Jersey City, NJ PMSA
Hudson County, NJ
Middlesex–Somerset–Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth–Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau–Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY
New Haven–Meriden, CT PMSA
Middlesex County, CT (part)
Clinton town, CT
Killingworth town, CT
New Haven County, CT (part)
Bethany town, CT
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT
Woodbridge town, CT
New York, NY PMSA
Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY
Queens County, NY
Richmond County, NY
Rockland County, NY
Westchester County, NY
Newark, NJ PMSA
Essex County, NJ
Morris County, NJ
Sussex County, NJ
Union County, NJ
Warren County, NJ
Newburgh, NY–PA PMSA
Orange County, NY
Pike County, PA
Stamford–Norwalk, CT PMSA
Fairfield County, CT (part)
Darien town, CT
Greenwich town, CT
New Canaan town, CT
Norwalk city, CT
Stamford city, CT
Weston town, CT
Westport town, CT
Wilton town, CT
Trenton, NJ PMSA
Mercer County, NJ
Waterbury, CT PMSA
Litchfield County, CT (part)
Bethlehem town, CT
Thomaston town, CT
Watertown town, CT
Woodbury town, CT
New Haven County, CT (part)
Middlebury town, CT
Naugatuck borough, CT
Prospect town, CT
Southbury town, CT
Waterbury city, CT
Wolcott town, CT

Newark, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Newburgh, NY–PA PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Norfolk–Virginia Beach–Newport News, VA–NC MSA

Currituck County, NC
Gloucester County, VA
Isle of Wight County, VA
James City County, VA
Mathews County, VA
York County, VA
Chesapeake city, VA
Hampton city, VA
Newport News city, VA
Norfolk city, VA
Poquoson city, VA
Portsmouth city, VA
Suffolk city, VA
Virginia Beach city, VA
Williamsburg city, VA

Oakland, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Ocala, FL MSA

Marion County, FL

Odessa–Midland, TX MSA

Ector County, TX
Midland County, TX

Oklahoma City, OK MSA

Canadian County, OK
Cleveland County, OK
Logan County, OK
McClain County, OK
Oklahoma County, OK
Pottawatomie County, OK

Olympia, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Omaha, NE–IA MSA

Pottawattamie County, IA
Cass County, NE
Douglas County, NE
Sarpy County, NE
Washington County, NE

Orange County, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Orlando, FL MSA

Lake County, FL
Orange County, FL
Osceola County, FL
Seminole County, FL

Owensboro, KY MSA

Daviess County, KY

Panama City, FL MSA

Bay County, FL

Parkersburg–Marietta, WV–OH MSA

Washington County, OH
Wood County, WV

Pensacola, FL MSA

Escambia County, FL
Santa Rosa County, FL

Peoria–Pekin, IL MSA

Peoria County, IL
Tazewell County, IL
Woodford County, IL

Philadelphia, PA–NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Atlantic–Cape May, NJ PMSA
Atlantic County, NJ
Cape May County, NJ

Philadelphia, PA–NJ PMSA

Burlington County, NJ
Camden County, NJ
Gloucester County, NJ
Salem County, NJ
Bucks County, PA
Chester County, PA
Delaware County, PA
Montgomery County, PA

Philadelphia County, PA
Vineland–Millville–Bridgeton, NJ PMSA
Cumberland County, NJ

Wilmington–Newark, DE–MD PMSA
New Castle County, DE
Cecil County, MD

Phoenix–Mesa, AZ MSA

Maricopa County, AZ
Pinal County, AZ

Pine Bluff, AR MSA

Jefferson County, AR

Pittsburgh, PA MSA

Allegheny County, PA
Beaver County, PA
Butler County, PA
Fayette County, PA
Washington County, PA
Westmoreland County, PA

Pittsfield, MA MSA

Berkshire County, MA (part)
Adams town, MA
Cheshire town, MA
Dalton town, MA
Hinsdale town, MA
Lanesborough town, MA
Lee town, MA
Lenox town, MA
Pittsfield city, MA
Richmond town, MA
Stockbridge town, MA

Portland, ME MSA

Cumberland County, ME (part)
Cape Elizabeth town, ME
Casco town, ME
Cumberland town, ME
Falmouth town, ME
Freeport town, ME
Gorham town, ME
Gray town, ME
North Yarmouth town, ME
Portland city, ME
Raymond town, ME
Scarborough town, ME
South Portland city, ME
Standish town, ME
Westbrook city, ME
Windham town, ME
Yarmouth town, ME

York County, ME (part)
Buxton town, ME
Hollis town, ME
Limington town, ME
Old Orchard Beach town, ME

Portland–Vancouver, OR–WA PMSA—see Portland–Salem, OR–WA CMSA

Portland–Salem, OR–WA CMSA

Portland–Vancouver, OR–WA PMSA

Clackamas County, OR
Columbia County, OR
Multnomah County, OR
Washington County, OR
Yamhill County, OR
Clark County, WA

Salem, OR PMSA

Marion County, OR
Polk County, OR

Portsmouth–Rochester, NH–ME PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Providence–Fall River–Warwick, RI–MA MSA

Bristol County, MA (part)
Attleboro city, MA
Fall River city, MA
North Attleborough town, MA
Rehoboth town, MA
Seekonk town, MA
Somerset town, MA
Swansea town, MA
Westport town, MA
Bristol County, RI
Barrington town, RI
Bristol town, RI
Warren town, RI
Kent County, RI
Coventry town, RI
East Greenwich town, RI
Warwick city, RI
West Greenwich town, RI
West Warwick town, RI
Newport County, RI (part)
Jamestown town, RI
Little Compton town, RI
Tiverton town, RI

Providence County, RI
Burrillville town, RI
Central Falls city, RI
Cranston city, RI
Cumberland town, RI
East Providence city, RI
Foster town, RI
Glocester town, RI
Johnston town, RI
Lincoln town, RI
North Providence town, RI
North Smithfield town, RI
Pawtucket city, RI
Providence city, RI
Scituate town, RI
Smithfield town, RI
Woonsocket city, RI
Washington County, RI (part)
Charlestown town, RI
Exeter town, RI
Narragansett town, RI
North Kingstown town, RI
Richmond town, RI
South Kingstown town, RI

Provo–Orem, UT MSA

Utah County, UT

Pueblo, CO MSA

Pueblo County, CO

Punta Gorda, FL MSA

Charlotte County, FL

Racine, WI PMSA—see Milwaukee–Racine, WI CMSA

Raleigh–Durham–Chapel Hill, NC MSA

Chatham County, NC
Durham County, NC
Franklin County, NC
Johnston County, NC
Orange County, NC
Wake County, NC

Rapid City, SD MSA

Pennington County, SD

Reading, PA MSA

Berks County, PA

Redding, CA MSA

Shasta County, CA

Reno, NV MSA

Washoe County, NV

Richland–Kennewick–Pasco, WA MSA

Benton County, WA
Franklin County, WA

Richmond–Petersburg, VA MSA

Charles City County, VA
Chesterfield County, VA
Dinwiddie County, VA
Goochland County, VA
Hanover County, VA
Henrico County, VA
New Kent County, VA
Powhatan County, VA
Prince George County, VA
Colonial Heights city, VA
Hopewell city, VA
Petersburg city, VA
Richmond city, VA

Riverside–San Bernardino, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Roanoke, VA MSA

Botetourt County, VA
Roanoke County, VA
Roanoke city, VA
Salem city, VA

Rochester, MN MSA

Olmsted County, MN

Rochester, NY MSA

Genesee County, NY
Livingston County, NY
Monroe County, NY
Ontario County, NY
Orleans County, NY
Wayne County, NY

Rockford, IL MSA

Boone County, IL
Ogle County, IL
Winnebago County, IL

Rocky Mount, NC MSA

Edgecombe County, NC
Nash County, NC

Sacramento, CA PMSA—see Sacramento–Yolo, CA CMSA

Sacramento–Yolo, CA CMSA

Sacramento, CA PMSA
El Dorado County, CA
Placer County, CA
Sacramento County, CA
Yolo, CA PMSA
Yolo County, CA

Saginaw–Bay City–Midland, MI MSA

Bay County, MI
Midland County, MI
Saginaw County, MI

St. Cloud, MN MSA

Benton County, MN
Stearns County, MN

St. Joseph, MO MSA

Andrew County, MO
Buchanan County, MO

St. Louis, MO–IL MSA

Clinton County, IL
Jersey County, IL
Madison County, IL
Monroe County, IL
St. Clair County, IL
Franklin County, MO
Jefferson County, MO
Lincoln County, MO
St. Charles County, MO
St. Louis County, MO
Warren County, MO
St. Louis city, MO

Salem, OR PMSA—see Portland–Salem, OR–WA CMSA

Salinas, CA MSA

Monterey County, CA

Salt Lake City–Ogden, UT MSA

Davis County, UT
Salt Lake County, UT
Weber County, UT

San Angelo, TX MSA

Tom Green County, TX

San Antonio, TX MSA

Bexar County, TX
Comal County, TX
Guadalupe County, TX
Wilson County, TX

San Diego, CA MSA

San Diego County, CA

San Francisco, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

San Francisco–Oakland–San Jose, CA CMSA

Oakland, CA PMSA
Alameda County, CA
Contra Costa County, CA
San Francisco, CA PMSA
Marin County, CA
San Francisco County, CA
San Mateo County, CA
San Jose, CA PMSA
Santa Clara County, CA
Santa Cruz–Watsonville, CA PMSA
Santa Cruz County, CA
Santa Rosa, CA PMSA
Sonoma County, CA
Vallejo–Fairfield–Napa, CA PMSA
Napa County, CA
Solano County, CA

San Jose, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

San Luis Obispo–Atascadero–Paso Robles, CA MSA

San Luis Obispo County, CA

Santa Barbara–Santa Maria–Lompoc, CA MSA

Santa Barbara County, CA

Santa Cruz–Watsonville, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Santa Fe, NM MSA

Los Alamos County, NM
Santa Fe County, NM

Santa Rosa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Sarasota–Bradenton, FL MSA

Manatee County, FL
Sarasota County, FL

Savannah, GA MSA

Bryan County, GA
Chatham County, GA
Effingham County, GA

Scranton–Wilkes-Barre–Hazleton, PA MSA

Columbia County, PA
Lackawanna County, PA
Luzerne County, PA
Wyoming County, PA

Seattle–Bellevue–Everett, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Seattle–Tacoma–Bremerton, WA CMSA

Bremerton, WA PMSA
Kitsap County, WA
Olympia, WA PMSA
Thurston County, WA
Seattle–Bellevue–Everett, WA PMSA
Island County, WA
King County, WA
Snohomish County, WA
Tacoma, WA PMSA
Pierce County, WA

Sharon, PA MSA

Mercer County, PA

Sheboygan, WI MSA

Sheboygan County, WI

Sherman–Denison, TX MSA

Grayson County, TX

Shreveport–Bossier City, LA MSA

Bossier Parish, LA
Caddo Parish, LA
Webster Parish, LA

Sioux City, IA–NE MSA

Woodbury County, IA
Dakota County, NE

Sioux Falls, SD MSA

Lincoln County, SD
Minnehaha County, SD

South Bend, IN MSA

St. Joseph County, IN

Spokane, WA MSA

Spokane County, WA

Springfield, IL MSA

Menard County, IL
Sangamon County, IL

Springfield, MO MSA

Christian County, MO
Greene County, MO
Webster County, MO

Springfield, MA MSA

Franklin County, MA (part)
Sunderland town, MA
Hampden County, MA (part)
Agawam city, MA
Chicopee city, MA

Springfield, MA MSA—Con.

Hampden County, MA (part)—Con.
 East Longmeadow town, MA
 Hampden town, MA
 Holyoke city, MA
 Longmeadow town, MA
 Ludlow town, MA
 Monson town, MA
 Montgomery town, MA
 Palmer town, MA
 Russell town, MA
 Southwick town, MA
 Springfield city, MA
 Westfield city, MA
 West Springfield town, MA
 Wilbraham town, MA
 Hampshire County, MA (part)
 Amherst town, MA
 Belchertown town, MA
 Easthampton town, MA
 Granby town, MA
 Hadley town, MA
 Hatfield town, MA
 Huntington town, MA
 Northampton city, MA
 Southampton town, MA
 South Hadley town, MA
 Ware town, MA
 Williamsburg town, MA

Stamford–Norwalk, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**State College, PA MSA**
Centre County, PA**Steubenville–Weirton, OH–WV MSA**

Jefferson County, OH
 Brooke County, WV
 Hancock County, WV

Stockton–Lodi, CA MSA
San Joaquin County, CA**Sumter, SC MSA**
Sumter County, SC**Syracuse, NY MSA**
Cayuga County, NY
Madison County, NY
Onondaga County, NY
Oswego County, NY**Tacoma, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA****Tallahassee, FL MSA**
Gadsden County, FL
Leon County, FL**Tampa–St. Petersburg–Clearwater, FL MSA**
Hernando County, FL
Hillsborough County, FL
Pasco County, FL
Pinellas County, FL**Terre Haute, IN MSA**
Clay County, IN
Vermillion County, IN
Vigo County, IN**Texarkana, TX–Texarkana, AR MSA**
Miller County, AR
Bowie County, TX**Toledo, OH MSA**

Fulton County, OH
 Lucas County, OH
 Wood County, OH

Topeka, KS MSA
Shawnee County, KS**Trenton, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****Tucson, AZ MSA**
Pima County, AZ**Tulsa, OK MSA**
Creek County, OK
Osage County, OK
Rogers County, OK
Tulsa County, OK
Wagoner County, OK**Tuscaloosa, AL MSA**
Tuscaloosa County, AL**Tyler, TX MSA**
Smith County, TX**Utica–Rome, NY MSA**
Herkimer County, NY
Oneida County, NY**Vallejo–Fairfield–Napa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA****Ventura, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA****Victoria, TX MSA**
Victoria County, TX**Vineland–Millville–Bridgeton, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Visalia–Tulare–Porterville, CA MSA**
Tulare County, CA**Waco, TX MSA**
McLennan County, TX**Washington, DC–MD–VA–WV PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA****Washington–Baltimore, DC–MD–VA–WV CMSA**
Baltimore, MD PMSA
Anne Arundel County, MD
Baltimore County, MD
Carroll County, MD
Harford County, MD
Howard County, MD
Queen Anne's County, MD
Baltimore city, MD
Hagerstown, MD PMSA
Washington County, MD
Washington, DC–MD–VA–WV PMSA
District of Columbia, DC
Calvert County, MD
Charles County, MD
Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA**Washington–Baltimore, DC–MD–VA–WV CMSA—Con.**

Washington, DC–MD–VA–WV PMSA—Con.
 Fauquier County, VA
 King George County, VA
 Loudoun County, VA
 Prince William County, VA
 Spotsylvania County, VA
 Stafford County, VA
 Warren County, VA
 Alexandria city, VA
 Fairfax city, VA
 Falls Church city, VA
 Fredericksburg city, VA
 Manassas city, VA
 Manassas Park city, VA
 Berkeley County, WV
 Jefferson County, WV

Waterbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Waterloo–Cedar Falls, IA MSA**
Black Hawk County, IA**Wausau, WI MSA**
Marathon County, WI**West Palm Beach–Boca Raton, FL MSA**
Palm Beach County, FL**Wheeling, WV–OH MSA**
Belmont County, OH
Marshall County, WV
Ohio County, WV**Wichita, KS MSA**
Butler County, KS
Harvey County, KS
Sedgwick County, KS**Wichita Falls, TX MSA**
Archer County, TX
Wichita County, TX**Williamsport, PA MSA**
Lycoming County, PA**Wilmington–Newark, DE–MD PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Wilmington, NC MSA**
Brunswick County, NC
New Hanover County, NC**Worcester, MA–CT PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****Yakima, WA MSA**
Yakima County, WA**Yolo, CA PMSA—see Sacramento–Yolo, CA CMSA****York, PA MSA**
York County, PA**Youngstown–Warren, OH MSA**
Columbiana County, OH
Mahoning County, OH
Trumbull County, OH**Yuba City, CA MSA**
Sutter County, CA
Yuba County, CA**Yuma, AZ MSA**
Yuma County, AZ

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

- Printed reports [P]
- CD-ROM [C]
- Highlights online [+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through January 1996) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available March 1996 through May 1996) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available November 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

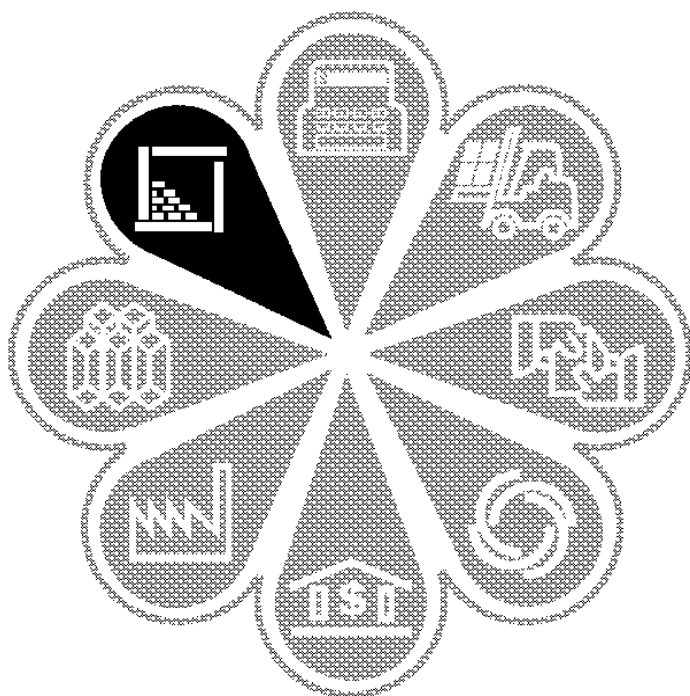
Census of Construction Industries

CC92-A-6

GEOGRAPHIC AREA SERIES

East South Central States

Alabama, Kentucky, Mississippi,
Tennessee



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If you have any questions concerning the statistics in this report, call 301-457-4680.

1992

Census of

Construction Industries

CC92-A-6

GEOGRAPHIC AREA SERIES

East South Central

States

Alabama, Kentucky, Mississippi,
Tennessee

Issued March 1996



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Ronald H. Brown, Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
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BUREAU OF THE CENSUS
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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

IV INTRODUCTION

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

CONSTRUCTION—GEOGRAPHIC AREA SERIES

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Assets and depreciation (gross book value):					
Beginning of year—buildings, machinery, and equipment	4				
End of year—total	2, 4	2	6	7	
End of year—buildings, machinery, and equipment	4				
Depreciation charges during year—buildings, machinery, and equipment	4				
Capital expenditures:					
Total capital expenditures	2, 4	2	6	7	11
New buildings—machinery and equipment	4				
Used buildings—machinery and equipment	4				
Communication services, costs for	3				
Employees:					
All employees—average number	1, 2, 3	2	6	7	11
Construction workers—average number	2, 3, 9	2, 9			
Construction workers—quarterly	3, 9	9			
Other employees—average number	3				
Other employees—quarterly	3				
Establishments:					
Number in business during year:					
All	1				
With payroll	1, 2, 3, 5, 9	2, 9	6	7	11
Without payroll	1				
Fringe benefits—legally required and voluntary expenditures	3				
Inventories	5				
Materials, components, supplies, and fuels—costs for	2, 3	2	6	7	11
Ownership—private or government owned	3				
Payroll:					
First-quarter, all employees	3				
Annual:					
All employees	2, 3	2	6	7	11
Construction workers	2, 3	2			
Other employees	3				
Power, fuels, and lubricants—costs for	3				
Proprietors and working partners:					
All establishments	1				
Establishments with payroll	1, 3				
Establishments without payroll	1				
Ratios, selected industry	10	10			
Receipts and value:					
Dollar value of business done:					
All establishments	1				
Establishments with payroll	1, 3		6	7	
Establishments without payroll	1				
Value of construction work, total	2, 3, 5, 8	2	6	7	11
For work subcontracted in from others	2, 3	2			
Other business receipts	3				

See footnotes at end of table.

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Receipts and value:—Con.					
Net value of construction work.	2, 3	2	6	7	11
Value added.	2, 3	2	6	7	11
Rental costs:					
Total.	2, 3	2	6	7	
For machinery and equipment.	3				
For buildings.	3				
Repairs to buildings and other structures.	3				
Repairs to machinery and equipment.	3				
Subcontract work to others, costs for.	2, 3	2	6	7	11
Type and class of construction ²	8				

Note: Data for 1987 and earlier years are also available in some of these tables.

¹CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan statistical area.

²Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.



Contents

Alabama

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Alabama. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 30,823 establishments in this State operating in the construction industries. These establishments accounted for \$8.3 billion in total dollar value of business done.

Most of the 30,823 construction establishments were small. Of the total, 23,170 were nonemployers, and over half of the employer establishments had less than 5 employees. The 3,256 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 81 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$7.6 billion in total dollar value of business done. Of this amount, \$7.5 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.9 billion, leaving net value of construction work of \$5.5 billion. In addition, these establishments paid out \$2.8 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$3.1 billion. (See Introduction and appendixes for explanation of terms.)

There were 7,653 establishments with total employment averaging 78,254 during the year. Total payroll for 1992 was \$1.6 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 23,170 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$641 million. Most of these establishments, about 83 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

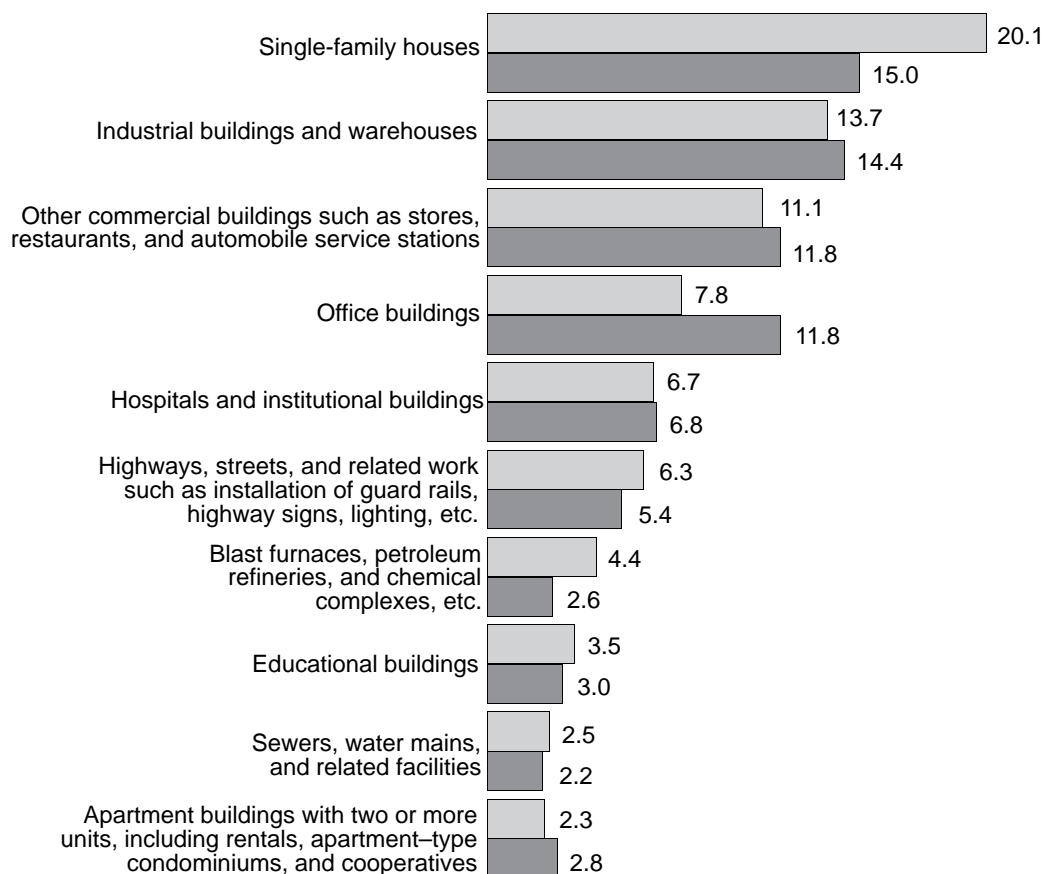



Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

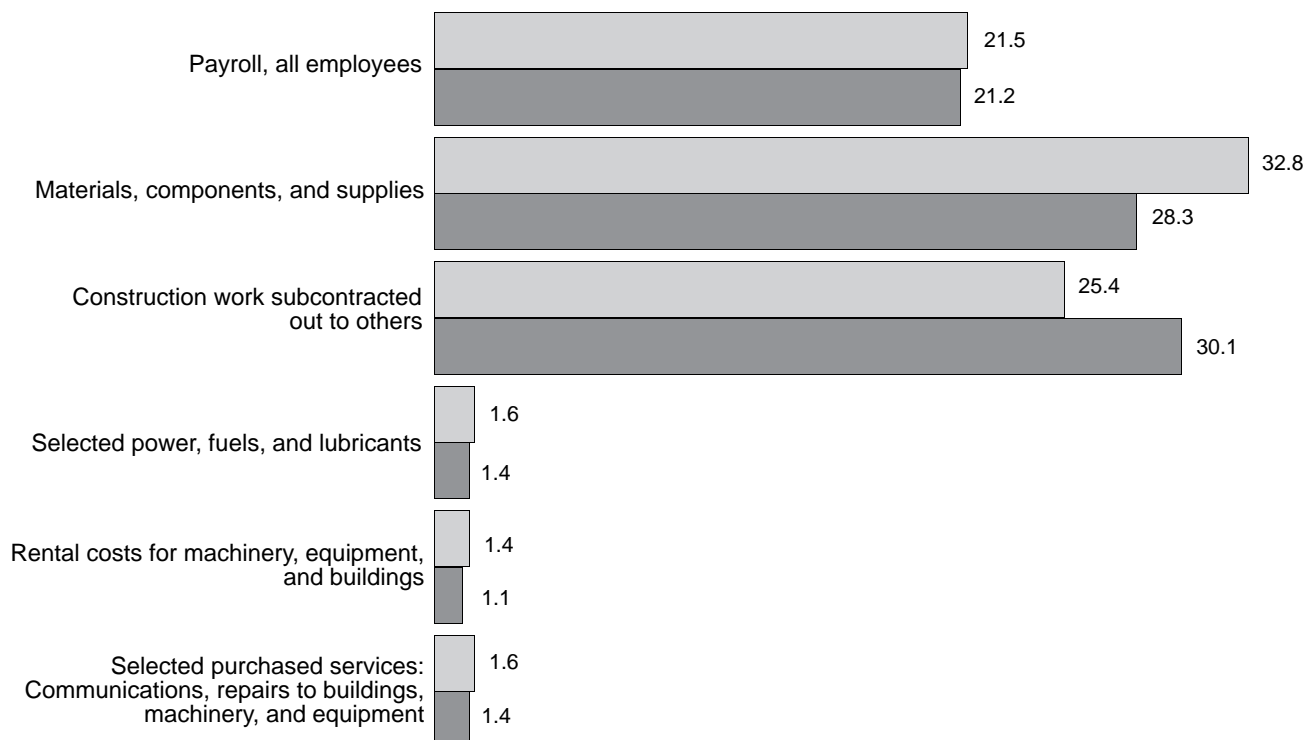


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	30 823	26 635	78 254	8 267 070	23 170	22 775	640 744	7 653	3 860	78 254	7 626 326	1	1
15	Building construction—General contractors and operative builders ----	5 798	4 173	23 721	3 750 344	3 500	3 157	262 603	2 298	1 016	23 721	3 487 741	2	2
16	Heavy construction other than building construction—contractors -----	1 136	745	13 498	1 512 443	514	505	14 962	622	240	13 498	1 497 481	2	1
17	Special trade contractors -----	23 889	21 717	41 036	3 004 283	19 156	19 113	363 179	4 733	2 604	41 036	2 641 104	1	1
1711	Plumbing, heating, and air-conditioning --	2 788	2 143	10 667	869 454	1 648	1 638	46 717	1 140	505	10 667	822 737	2	2
1731	Electrical work -----	1 940	1 568	6 756	489 706	1 286	1 272	19 303	654	296	6 756	470 403	3	5
	1987													
15, 16, 17	Construction industries² -----	30 062	24 200	84 812	8 542 039	22 662	22 294	1 051 902	7 400	1 906	84 812	7 490 137	1	1
15	Building construction—General contractors and operative builders ----	6 984	4 782	(D)	4 268 500	4 712	4 364	423 385	2 272	418	(D)	3 845 115	(D)	2
16	Heavy construction other than building construction—contractors -----	999	544	16 069	1 485 115	396	401	27 635	603	143	16 069	1 457 480	2	1
17	Special trade contractors -----	21 356	18 289	(D)	2 596 949	16 949	16 990	453 258	4 407	1 299	(D)	2 143 691	(D)	1
1711	Plumbing, heating, and air-conditioning --	2 586	1 785	9 187	661 877	1 519	1 524	61 212	1 067	261	9 187	600 665	2	2
1731	Electrical work -----	1 702	1 240	6 813	442 178	1 102	1 104	28 694	600	136	6 813	413 484	3	3

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	7 653	78 254	62 106	1 637 862	1 145 090	7 461 733	5 524 109	3 064 915
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	1 362	5 316	3 882	79 442	52 325	565 373	395 770	218 646
1522	Other residential buildings -----	60	709	556	13 007	8 401	95 730	51 181	24 558
1531	Operative builders -----	296	1 317	637	29 580	10 125	431 333	287 102	74 225
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	163	6 739	5 643	174 570	134 499	494 291	386 242	256 468
1542	Nonresidential buildings, n.e.c. -----	416	9 640	7 210	238 901	149 164	1 866 014	800 967	340 077
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	149	4 268	3 644	87 067	63 395	441 340	357 941	221 984
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	15	763	632	16 240	12 549	92 482	63 712	27 009
1623	Water, sewer, and utility lines -----	167	3 082	2 554	63 870	45 806	264 735	226 169	134 470
1629	Heavy construction, n.e.c. -----	292	5 384	3 993	143 717	84 469	634 169	566 090	301 392
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	1 140	10 667	8 328	237 663	172 412	800 645	743 871	437 945
1721	Painting and paper hanging -----	374	2 575	2 127	48 723	35 993	129 873	119 110	85 163
1731	Electrical work -----	654	6 756	5 412	141 907	102 150	464 828	430 120	254 651
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	300	2 941	2 644	39 252	32 842	122 657	(D)	75 355
1742	Plastering, drywall, and insulation work -----	233	2 693	2 223	50 292	38 185	168 090	155 048	92 605
1743	Terrazzo, tile, marble, and mosaic work -----	105	672	545	11 777	7 778	35 646	35 377	22 371
175	Carpentry and floor work:								
1751	Carpentry -----	372	1 543	1 293	23 837	19 452	96 396	82 870	46 376
1752	Floor laying and other floor work -----	131	557	422	8 944	6 168	39 293	36 648	20 997
1761	Roofing, siding, and sheet metal work -----	379	3 002	2 375	54 075	36 443	188 620	175 777	96 922
1771	Concrete work -----	279	2 345	2 033	35 886	27 887	125 081	116 216	72 084
1781	Water well drilling -----	24	131	96	2 321	1 492	9 200	8 934	5 089
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	44	873	745	20 437	16 239	43 277	40 921	37 974
1793	Glass and glazing work -----	42	582	445	9 892	6 461	35 864	(D)	18 479
1794	Excavation work -----	204	1 226	988	20 728	16 257	93 005	80 872	51 679
1795	Wrecking and demolition work -----	7	186	165	2 796	2 301	5 671	5 387	6 878
1796	Installing building equipment, n.e.c. -----	55	1 235	1 023	27 889	21 508	66 569	64 109	46 959
1799	Special trade contractors, n.e.c. -----	392	3 053	2 491	55 048	40 790	151 550	140 928	94 561

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
2 623 787	1 937 625	1 768 171	103 826	115 313	1 067 891	84 812	7 261 360	2 946 167	1	1	5	15, 16, 17
												15
185 401	169 603	(S)	5 402	6 315	41 057	5 816	497 097	177 006	6	7	30	152
27 314	44 550	4 254	1 100	(S)	(S)	532	85 780	24 498	11	8	(S)	1521
(S)	144 232	*6 744	(S)	2 570	26 369	(D)	359 331	(D)	10	12	33	1531
131 290	108 048	18 898	15 406	4 454	28 908	8 758	584 147	321 037	3	4	12	154
478 722	1 065 046	34 751	16 288	7 981	100 181	13 075	2 225 696	450 271	3	2	8	1542
												16
159 968	83 399	101 468	8 774	15 274	219 531	3 587	371 534	143 253	3	2	5	1611
37 057	28 770	16 386	807	3 845	28 372	530	57 804	22 516	5	3	26	162
96 746	38 566	69 126	7 452	8 377	80 590	3 519	229 765	133 635	5	6	12	1622
300 042	68 079	91 303	9 541	14 921	139 372	8 433	727 367	365 702	3	2	16	1623
												17
328 018	56 774	399 435	10 622	15 133	98 325	9 187	596 364	299 431	2	2	11	1711
34 717	10 762	79 193	3 319	2 484	20 003	2 277	103 009	70 047	6	5	22	1721
181 044	*34 708	260 706	4 394	7 431	58 376	6 813	401 661	231 415	3	3	15	1731
(D)	(D)	88 114	1 314	(D)	12 251	3 422	103 130	58 742	4	(D)	(D)	174
(S)	13 041	142 273	(S)	4 166	22 125	3 051	189 809	109 099	7	7	24	1742
15 645	269	28 229	230	298	3 975	409	20 931	11 873	11	8	11	1743
37 509	13 526	43 722	588	(S)	5 904	1 144	42 502	23 135	10	11	(S)	175
17 567	2 645	24 608	350	765	5 121	(D)	33 172	(D)	12	13	39	1752
82 207	12 843	85 503	2 425	3 365	33 048	2 631	141 776	81 933	7	6	28	1761
46 393	8 866	70 923	2 042	2 432	32 845	2 275	117 493	69 076	9	8	17	1771
3 844	266	468	41	206	(S)	146	7 710	4 651	18	20	18	1781
(D)	2 356	23 381	2 585	(S)	15 389	799	35 511	23 814	8	8	(S)	179
(D)	(D)	26 792	476	165	2 341	643	47 952	24 759	4	(D)	(S)	1791
29 912	12 133	(S)	(S)	*5 441	43 805	1 004	65 947	46 775	12	14	52	1793
(D)	284	557	(D)	(D)	4 952	95	4 437	4 636	(Z)	(Z)	(D)	1794
(D)	2 461	14 422	1 436	*989	13 359	1 239	68 409	49 915	6	6	62	1795
51 619	10 622	45 752	(D)	*3 313	22 682	2 527	118 173	77 387	7	7	58	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	7 653	7 400	5 782	7 400	1	1	2	3
Proprietors and working partners.....	3 860	1 906	2 066	4 834	2	6	5	5
All employees**	78 254	84 812	67 397	80 752	1	1	1	1
Construction workers:								
March.....	59 013	68 592	52 158	65 793	1	1	1	1
May	62 785	71 328	54 903	71 465	1	1	1	1
August	65 242	71 562	56 804	76 029	1	1	1	1
November	61 383	66 100	53 026	68 921	1	1	1	1
Average	62 106	69 395	54 729	70 589	1	1	1	1
Other employees:								
March.....	16 195	15 638	12 584	9 776	1	1	2	3
May	16 061	15 356	(NA)	(NA)	1	1	(NA)	(NA)
August	16 161	15 490	(NA)	(NA)	1	1	(NA)	(NA)
November	16 177	15 214	(NA)	(NA)	1	1	(NA)	(NA)
Average	16 148	15 424	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	1 637 862	1 588 642	1 029 730	844 281	1	1	1	1
Payroll, construction workers	1 145 090	1 207 030	776 988	683 932	1	1	1	1
Payroll, other employees	492 772	381 612	252 741	160 348	1	1	1	3
First-quarter payroll, all employees	365 581	369 504	235 588	179 990	1	1	1	1
Fringe benefits, all employees	341 995	290 393	186 625	133 470	1	1	1	1
Legally required expenditures	248 925	210 722	137 051	89 155	1	1	1	1
Voluntary expenditures	93 070	79 670	49 574	44 315	2	1	1	1
Dollar value of business done	7 626 326	7 490 137	4 489 385	3 616 621	1	1	1	1
Value of construction work	7 461 733	7 261 360	4 374 981	3 495 064	1	1	1	1
Value of construction work subcontracted in from others	1 768 171	1 271 150	788 020	684 140	3	2	2	1
Other business receipts	164 593	166 166	91 591	121 557	3	4	3	9
Net value of construction†	5 524 109	5 005 363	3 043 654	2 620 646	1	1	1	1
Value added††	3 064 915	2 946 167	1 725 329	1 515 343	1	1	1	1
Selected costs	4 561 411	4 481 360	2 741 243	2 054 710	1	1	1	1
Materials, components, and supplies	2 501 769	2 119 247	1 323 104	1 107 660	1	2	1	1
Construction work subcontracted out to others	1 937 625	2 255 997	1 331 327	874 419	2	1	1	1
Selected power, fuels, and lubricants	122 018	106 114	86 811	72 631	2	2	2	4
Electricity.....	21 660	16 743	12 058	9 847	3	2	2	4
Natural gas	5 232	4 151	3 583	4 988	5	3	3	11
Gasoline and diesel fuel	88 305	76 535	63 671	46 356	2	2	2	3
On highway use	62 688	56 662	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use	25 617	19 873	(NA)	(NA)	3	4	(NA)	(NA)
Other, including lubricating oils and greases.....	6 821	8 684	7 497	11 440	3	3	4	9
Rental cost for machinery, equipment, and buildings	103 826	83 345	46 947	38 277	3	3	2	3
For machinery and equipment	77 080	61 514	38 116	32 713	3	3	2	3
For buildings.....	26 747	21 831	8 831	5 564	4	3	4	4
Selected purchased services	119 208	108 448	70 267	66 089	3	2	1	2
Communication services	35 836	30 089	18 219	14 074	3	2	2	3
Repairs to buildings and other structures	5 581	5 216	3 292	2 953	7	6	4	4
Repairs to machinery and equipment	77 791	73 142	48 755	49 062	4	2	2	2
Ownership of construction projects:								
Value of construction work	7 461 733	7 261 360	4 374 981	3 495 064	1	1	1	1
Government owned	1 849 619	1 924 162	1 210 899	897 455	3	2	2	1
Federal	523 356	845 515	(NA)	(NA)	4	3	(NA)	(NA)
State and local	1 326 263	1 078 647	(NA)	(NA)	4	3	(NA)	(NA)
Privately owned	5 612 115	5 337 198	3 164 082	2 597 609	2	2	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 021 646	826 934	2	3
Capital expenditures, other than land -----	115 313	128 753	5	5
New -----	87 168	88 384	5	4
Used -----	28 145	40 368	11	12
Retirements and disposition of depreciable assets -----	69 069	59 306	15	7
End-of-year gross book value of depreciable assets -----	1 067 891	896 381	2	2
Depreciation charges during year -----	120 377	99 887	3	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	125 289	175 152	6	8
Capital expenditures, other than land -----	13 059	25 512	16	11
New buildings and other structures -----	8 416	13 965	19	11
Used buildings and other structures -----	4 643	11 547	27	20
Retirements and disposition of depreciable assets -----	(S)	14 227	(S)	22
End-of-year gross book value of depreciable assets -----	133 663	186 436	6	7
Depreciation charges during year -----	10 842	15 933	8	10
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	896 358	651 782	2	2
Capital expenditures, other than land -----	102 254	103 240	5	5
New machinery and equipment, including automobiles and trucks -----	78 752	74 419	5	5
New automobiles and trucks, intended primarily for highway use -----	30 470	33 444	7	5
Used machinery and equipment, including automobiles and trucks -----	23 503	28 821	10	10
Retirements and disposition of depreciable assets -----	64 384	45 078	16	5
End-of-year gross book value of depreciable assets -----	934 228	709 944	2	2
Depreciation charges during year -----	109 535	83 953	3	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	7 653	1
Value of construction work	7 461 733	1
Establishments with inventories:		
Number	1 900	3
Value of construction work	2 501 325	1
Inventories ¹ :		
End of 1992, materials and supplies	104 276	23
End of 1991, materials and supplies	90 308	10
Establishments with no inventories:		
Number	2 878	3
Value of construction work	3 562 022	1
Establishments not reporting:		
Number	2 876	2
Value of construction work	1 398 386	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	7 653	(S)	1 530	926	581	136	67	9	5	2	
All employees** -----	78 254	8 518	9 941	12 262	17 165	9 028	9 852	2 770	8 720	(D)	
Payroll, all employees -----	1 637 862	118 347	164 698	221 516	362 419	211 355	237 870	79 424	242 233	(D)	
Dollar value of business done -----	7 626 326	887 816	801 725	928 678	1 637 782	910 219	1 120 849	359 531	979 726	(D)	
Value of construction work -----	7 461 733	880 282	790 900	909 485	1 608 309	894 573	1 081 224	358 513	938 448	(D)	
Net value of construction work† -----	5 524 109	670 396	615 049	731 192	1 194 192	641 886	792 221	229 580	649 592	(D)	
Value added†† -----	3 064 915	328 057	358 521	444 804	672 056	377 371	461 569	78 047	344 490	(D)	
Cost of materials, components, supplies, and fuels -----	2 623 787	349 872	267 354	305 582	551 610	280 161	370 277	(S)	346 380	(D)	
Cost of construction work subcontracted out to others -----	1 937 625	209 886	175 851	178 293	414 116	252 687	289 003	128 933	288 856	(D)	
Rental cost for machinery, equipment, and buildings -----	103 826	(S)	8 980	13 272	24 367	13 984	13 419	3 088	18 769	(D)	
Capital expenditures, other than land -----	115 313	12 435	12 519	25 470	26 260	14 279	16 718	2 169	5 464	(D)	
End-of-year gross book value of depreciable assets -----	1 067 891	97 627	112 250	159 725	237 336	156 201	225 263	34 580	44 910	(D)	
1987											
All employees** -----	84 812	(S)	9 302	12 206	15 446	10 414	8 324	5 349	6 496	8 595	
Value of construction work -----	7 261 360	(S)	575 062	894 592	1 257 999	886 242	1 388 704	(D)	1 524 830	(D)	
Value added†† -----	2 946 167	(S)	273 918	402 635	538 551	391 430	500 980	(D)	563 654	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	4	6	5	3	(Z)	(Z)	(Z)	(Z)	(D)	
Net value of construction work† -----	1	6	6	5	2	(Z)	(Z)	(Z)	(Z)	(D)	
Capital expenditures, other than land -----	5	14	18	17	4	(Z)	(Z)	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	7 653	(S)	(S)	1 125	1 984	1 291	997	790	309	132	90
All employees** -----	78 254	(S)	(S)	2 274	6 348	7 722	9 811	13 993	9 506	8 436	19 114
Payroll, all employees -----	1 637 862	(S)	(S)	20 861	80 140	118 260	166 412	276 709	226 251	203 783	537 361
Dollar value of business done -----	7 626 326	(S)	(S)	81 416	320 162	448 630	682 709	1 183 859	1 050 130	891 194	2 943 103
Value of construction work -----	7 461 733	(S)	(S)	80 834	318 571	442 149	672 234	1 168 427	1 021 177	876 451	2 856 991
Net value of construction work† -----	5 524 109	(S)	(S)	72 217	285 311	388 192	566 374	951 591	767 766	659 146	1 810 510
Value added†† -----	3 064 915	(S)	(S)	41 839	165 858	226 859	328 053	536 805	471 270	388 724	891 217
Cost of materials, components, supplies, and fuels -----	2 623 787	(S)	(S)	30 960	121 043	167 813	248 797	430 217	325 449	285 165	1 005 436
Cost of construction work subcontracted out to others -----	1 937 625	(S)	(S)	8 617	(S)	53 957	105 860	216 836	253 411	217 305	1 046 451
Rental cost for machinery, equipment, and buildings -----	103 826	(S)	(S)	934	4 274	7 044	11 314	14 469	13 203	17 379	34 886
Capital expenditures, other than land -----	115 313	(S)	(S)	1 785	7 372	10 239	13 038	24 972	19 981	12 137	25 367
End-of-year gross book value of depreciable assets -----	1 067 891	(S)	(S)	(S)	62 374	79 499	103 339	189 247	159 225	133 690	323 165
1987											
All employees** -----	84 812	(S)	(S)	(S)	(S)	7 315	9 523	13 110	9 722	9 831	24 645
Value of construction work -----	7 261 360	(S)	(S)	(S)	(S)	394 500	629 453	996 090	830 060	908 514	3 096 993
Value added†† -----	2 946 167	(S)	(S)	(S)	(S)	197 181	276 429	461 928	373 052	369 274	1 045 409
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	10	7	7	6	4	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	7	5	6	6	5	5	2	(Z)
Capital expenditures, other than land -----	5	(S)	(S)	27	28	19	15	14	8	3	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	7 461 733	4 745 233	1 500 000	941 640	1	1	2	2
Building construction	5 424 092	3 514 764	1 263 194	646 135	1	2	2	3
Single-family houses	1 501 223	1 112 620	229 186	159 417	4	5	7	8
Single-family houses, detached	1 412 625	1 056 154	216 754	139 717	4	5	7	9
Single-family houses, attached, including townhouses and townhouse-type condominiums	88 598	56 467	12 432	19 700	11	14	19	17
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	173 628	105 381	41 254	26 994	10	16	5	13
Other residential buildings, including hotels, motels, and tourist cabins.....	75 290	55 871	12 234	7 186	7	9	4	6
Office buildings	580 540	320 067	193 760	66 713	2	3	4	4
Other commercial buildings such as stores, restaurants, and automobile service stations	829 132	604 046	150 806	74 280	2	2	5	6
Industrial buildings and warehouses	1 023 296	554 604	232 109	236 583	2	3	3	3
Industrial buildings	911 214	478 461	209 360	223 393	2	2	3	2
Warehouses	112 082	76 144	22 748	13 190	7	9	5	19
Religious buildings	119 382	80 723	29 878	8 781	4	4	9	13
Educational buildings	260 092	169 069	75 449	15 573	4	3	9	12
Hospitals and institutional buildings	500 059	275 051	186 654	38 354	3	3	6	4
Other nonresidential buildings	361 450	237 331	111 865	12 254	3	3	3	9
Nonbuilding construction	1 762 781	1 230 469	236 806	295 505	2	2	4	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	467 932	277 324	92 403	98 205	2	2	4	2
Airport runways and related work	43 308	35 377	(S)	2 815	2	1	(S)	6
Bridges, tunnels, and elevated highways	111 042	83 832	21 257	5 953	2	2	6	4
Conservation and development construction	48 174	25 835	(S)	7 841	17	16	(S)	9
Power and communication transmission lines, towers, and related facilities.....	127 316	87 722	10 192	29 402	18	15	13	36
Sewers, water mains, and related facilities.....	189 486	150 384	21 888	17 215	8	9	22	8
Sewers, sewer lines, septic systems, and related facilities	104 771	81 736	14 595	8 441	9	10	32	10
Water mains and related facilities.....	84 715	68 649	7 293	8 774	10	11	16	12
Pipeline construction other than sewer or water lines	70 730	41 310	13 369	16 051	6	2	27	4
Blast furnaces, petroleum refineries, chemical complexes, etc.	324 834	(D)	(D)	55 947	1	(D)	(D)	2
Power plants	116 525	(D)	(D)	15 345	1	(D)	(D)	1
Sewage treatment and water treatment plants	125 509	112 980	9 598	2 931	3	3	3	7
Other nonbuilding construction	137 924	75 202	18 923	43 800	9	10	14	16
Construction work, n.s.k.	274 860	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
1987								
Value of construction work	7 261 360	4 865 584	1 128 688	968 523	1	1	2	2
Building construction	5 449 395	3 826 731	937 446	685 218	1	2	2	2
Single-family houses	1 090 029	816 862	148 019	125 147	4	6	6	6
Single-family houses, detached	982 429	732 143	135 098	115 188	5	6	6	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	107 599	84 719	12 921	9 959	14	17	14	19
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	201 837	167 574	11 687	22 575	5	5	14	20
Other residential buildings, including hotels, motels, and tourist cabins.....	233 668	189 259	32 856	11 552	3	3	9	16
Office buildings	854 118	685 362	122 698	46 058	2	1	7	8
Other commercial buildings such as stores, restaurants, and automobile service stations	857 000	676 105	133 216	47 678	4	4	5	10
Industrial buildings and warehouses	1 045 655	473 809	210 322	361 523	1	2	3	1
Industrial buildings	935 501	395 088	190 733	349 679	1	2	3	1
Warehouses	110 154	78 721	19 589	11 843	7	8	12	13
Religious buildings	107 275	79 017	22 298	5 958	8	8	13	13
Educational buildings	214 227	143 005	56 702	14 518	8	11	7	17
Hospitals and institutional buildings	495 503	313 548	166 134	15 820	2	1	6	9
Other nonresidential buildings	350 083	282 190	33 514	34 389	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	1 513 402	1 038 853	191 242	283 306	2	2	4	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	389 595	262 571	55 433	71 590	2	3	4	4
Bridges, tunnels, and elevated highways	97 091	70 564	12 542	* 13 984	9	1	1	62
Power and communication transmission lines, towers, and related facilities.....	49 105	29 627	5 026	14 451	10	14	15	3
Sewers, water mains, and related facilities.....	162 530	127 384	12 116	23 029	6	7	18	5
Sewers, sewer lines, septic systems, and related facilities	95 728	75 904	6 799	13 024	7	8	18	8
Water mains and related facilities.....	66 801	51 480	5 317	10 004	10	11	24	6
Pipeline construction other than sewer or water lines	45 886	24 887	13 620	7 378	2	3	1	(Z)
Blast furnaces, petroleum refineries, chemical complexes, etc.	191 831	(D)	(D)	62 302	1	(D)	(D)	2
Power plants	244 018	(D)	(D)	47 897	1	(D)	(D)	2
Sewage treatment and water treatment plants	111 041	84 334	21 722	* 4 984	8	4	27	46
Other nonbuilding construction	222 305	158 335	26 286	37 691	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	298 563	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	7 653	62 106	59 013	62 785	65 242	61 383	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	1 362	3 882	3 653	3 982	4 121	3 774	4	6	6	7	7	7
1522	Other residential buildings -----	60	556	687	583	528	427	21	12	16	11	15	17
1531	Operative builders -----	296	637	662	723	588	576	12	12	13	12	13	13
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	163	5 643	5 499	6 001	5 982	5 091	14	3	3	3	3	4
1542	Nonresidential buildings, n.e.c. ----	416	7 210	7 204	7 111	7 520	7 005	8	4	4	4	4	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	149	3 644	3 146	3 768	3 965	3 698	9	3	3	3	3	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	15	632	553	611	673	692	17	4	5	4	4	5
1623	Water, sewer, and utility lines -----	167	2 554	2 505	2 624	2 581	2 505	10	5	4	4	5	5
1629	Heavy construction, n.e.c. -----	292	3 993	3 785	4 075	4 133	3 978	11	3	4	4	3	3
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 140	8 328	7 806	8 298	8 782	8 426	3	2	2	3	4	2
1721	Painting and paper hanging -----	374	2 127	1 900	1 995	2 419	2 192	6	6	7	7	7	7
1731	Electrical work -----	654	5 412	5 120	5 244	5 708	5 576	4	3	3	4	5	4
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	300	2 644	2 399	2 667	2 893	2 616	4	4	6	5	4	4
1742	Plastering, drywall, and insulation work -----	233	2 223	2 188	2 219	2 297	2 189	9	7	9	9	6	6
1743	Terrazzo, tile, marble, and mosaic work -----	105	545	586	536	552	506	14	12	14	10	17	10
175	Carpentry and floor work:												
1751	Carpentry -----	372	1 293	1 257	1 401	1 350	1 163	9	10	11	10	10	11
1752	Floor laying and other floor work --	131	422	400	414	453	421	13	12	11	14	13	13
1761	Roofing, siding, and sheet metal work -----	379	2 375	2 234	2 299	2 504	2 464	6	7	6	7	7	10
1771	Concrete work -----	279	2 033	1 798	2 207	2 209	1 916	9	9	8	9	9	11
1781	Water well drilling -----	24	96	96	95	100	94	8	14	15	13	14	14
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	44	745	739	762	723	757	12	8	7	7	10	10
1793	Glass and glazing work -----	42	445	415	449	445	470	12	4	6	4	4	3
1794	Excavation work -----	204	988	880	987	1 083	1 001	12	11	10	10	11	12
1795	Wrecking and demolition work -----	7	165	171	180	167	142	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1796	Installing building equipment, n.e.c. -----	55	1 023	954	1 062	1 009	1 066	11	5	8	5	5	4
1799	Special trade contractors, n.e.c. ----	392	2 491	2 376	2 490	2 456	2 640	8	7	8	8	7	7

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees* per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	10.2	20.9	120.1	.220	.352	.260	.237	.014
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.9	14.9	145.6	.141	.328	.300	(S)	.010
1522	Other residential buildings -----	11.7	18.3	172.2	.136	.285	.465	.044	.011
1531	Operative builders -----	4.5	22.5	677.1	.069	(S)	.334	*.016	(S)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	41.2	25.9	87.6	.353	.266	.219	.038	.031
1542	Nonresidential buildings, n.e.c. -----	23.2	24.8	258.8	.128	.257	.571	.019	.009
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	28.7	20.4	121.1	.197	.362	.189	.230	.020
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	50.7	21.3	146.3	.176	.401	.311	.177	.009
1623	Water, sewer, and utility lines -----	18.5	20.7	103.7	.241	.365	.146	.261	.028
1629	Heavy construction, n.e.c. -----	18.4	26.7	158.8	.227	.473	.107	.144	.015
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	9.4	22.3	96.1	.297	.410	.071	.499	.013
1721	Painting and paper hanging -----	6.9	18.9	61.1	.375	.267	.083	.610	.026
1731	Electrical work -----	10.3	21.0	85.9	.305	.389	*.075	.561	.009
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	9.8	13.3	46.4	.320	(D)	(D)	.718	.011
1742	Plastering, drywall, and insulation work -----	11.5	18.7	75.6	.299	(S)	.078	.846	(S)
1743	Terrazzo, tile, marble, and mosaic work -----	6.4	17.5	65.4	.330	.439	.008	.792	.006
175	Carpentry and floor work:								
1751	Carpentry -----	4.2	15.4	74.6	.247	.389	.140	.454	.006
1752	Floor laying and other floor work -----	4.3	16.1	93.1	.228	.447	.067	.626	.009
1761	Roofing, siding, and sheet metal work -----	7.9	18.0	79.4	.287	.436	.068	.453	.013
1771	Concrete work -----	8.4	15.3	61.5	.287	.371	.071	.567	.016
1781	Water well drilling -----	5.5	17.7	95.8	.252	.418	.029	.051	.004
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	20.0	23.4	58.1	.472	(D)	.054	.540	.060
1793	Glass and glazing work -----	13.8	17.0	80.6	.276	(D)	(D)	.747	.013
1794	Excavation work -----	6.0	16.9	94.1	.223	.322	.130	(S)	(S)
1795	Wrecking and demolition work -----	26.6	15.0	34.4	.493	(D)	.050	.098	(D)
1796	Installing building equipment, n.e.c. -----	22.5	22.6	65.1	.419	(D)	.037	.217	.022
1799	Special trade contractors, n.e.c. -----	7.8	18.0	60.8	.363	.341	.070	.302	(D)

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	BIRMINGHAM, AL MSA											
15,16,17	Construction industries	1 833	27 527	648 158	2 948 592	2 083 480	1 149 916	981 338	865 112	35 836	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	276	1 058	16 342	119 077	86 965	51 377	35 942	32 112	1 276	17	18
1522	Other residential buildings	(S)	185	3 535	17 430	11 804	(S)	6 291	5 626	—	19	20
1531	Operative builders	100	343	7 775	117 554	79 551	32 805	47 525	38 004	*71	21	27
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	44	(D)	(D)	271 933	(D)	(D)	77 434	(D)	1 737	(D)	(D)
1542	Nonresidential buildings, n.e.c.	122	4 798	133 117	1 017 510	437 042	186 253	258 629	580 468	4 762	5	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	31	888	20 927	105 856	81 302	52 258	36 415	24 554	3 725	6	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	42	1 218	26 848	125 691	99 659	52 877	(S)	26 033	3 077	6	10
1629	Heavy construction, n.e.c.	65	1 328	40 811	233 045	199 246	95 419	105 090	33 800	4 795	5	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	281	3 299	71 134	265 910	244 356	125 957	122 778	21 554	2 816	4	3
1721	Painting and paper hanging	109	1 041	19 348	49 496	43 287	30 198	13 135	6 209	937	11	6
1731	Electrical work	158	2 007	46 189	173 384	147 739	87 305	61 395	*25 645	2 590	5	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	68	1 077	19 475	72 625	70 494	42 145	28 385	2 132	1 230	9	4
1742	Plastering, drywall, and insulation work	57	1 204	26 207	81 972	77 418	49 765	29 652	4 554	1 593	5	7
1743	Terrazzo, tile, marble, and mosaic work	(S)	241	4 113	13 599	13 444	7 845	5 599	(S)	129	9	6
175	Carpentry and floor work:											
1751	Carpentry	68	400	(D)	21 251	20 048	13 024	7 766	1 203	*246	21	15
1752	Floor laying and other floor work	(S)	118	1 897	(D)	(D)	5 373	3 727	331	(S)	16	(D)
1761	Roofing, siding, and sheet metal work	(S)	569	10 494	39 544	35 570	17 825	19 202	3 974	441	12	9
1771	Concrete work	(S)	639	12 026	41 545	39 328	26 259	14 975	2 216	898	16	14
1781	Water well drilling	*3	(S)	(S)	*2 393	(D)	*1 444	(D)	(D)	—	(S)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	481	14 164	28 430	26 377	27 909	5 249	2 053	372	5	8
1793	Glass and glazing work	14	332	4 978	19 441	17 329	(D)	9 326	2 112	(D)	1	1
1794	Excavation work	(S)	138	*3 010	*12 821	9 305	5 473	*4 276	*3 516	1 130	32	31
1795	Wrecking and demolition work	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	16	437	14 546	30 036	29 370	21 230	10 422	666	61	11	7
1799	Special trade contractors, n.e.c.	141	1 189	18 593	51 475	48 640	31 804	17 506	2 835	2 688	12	9

AL-14 ALABAMA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Contents

Kentucky

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Kentucky. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 31,512 establishments in this State operating in the construction industries. These establishments accounted for \$7.2 billion in total dollar value of business done.

Most of the 31,512 construction establishments were small. Of the total, 24,175 were nonemployers, and over half of the employer establishments had less than 5 employees. The 3,062 construction establishments with 5 employees or more, while representing only 10 percent of all establishments, accounted for more than 80 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$6.5 billion in total dollar value of business done. Of this amount, \$6.4 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.6 billion, leaving net value of construction work of \$4.8 billion. In addition, these establishments paid out \$2.5 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$2.7 billion. (See Introduction and appendixes for explanation of terms.)

There were 7,337 establishments with total employment averaging 63,778 during the year. Total payroll for 1992 was \$1.4 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 24,175 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$642 million. Most of these establishments, about 83 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

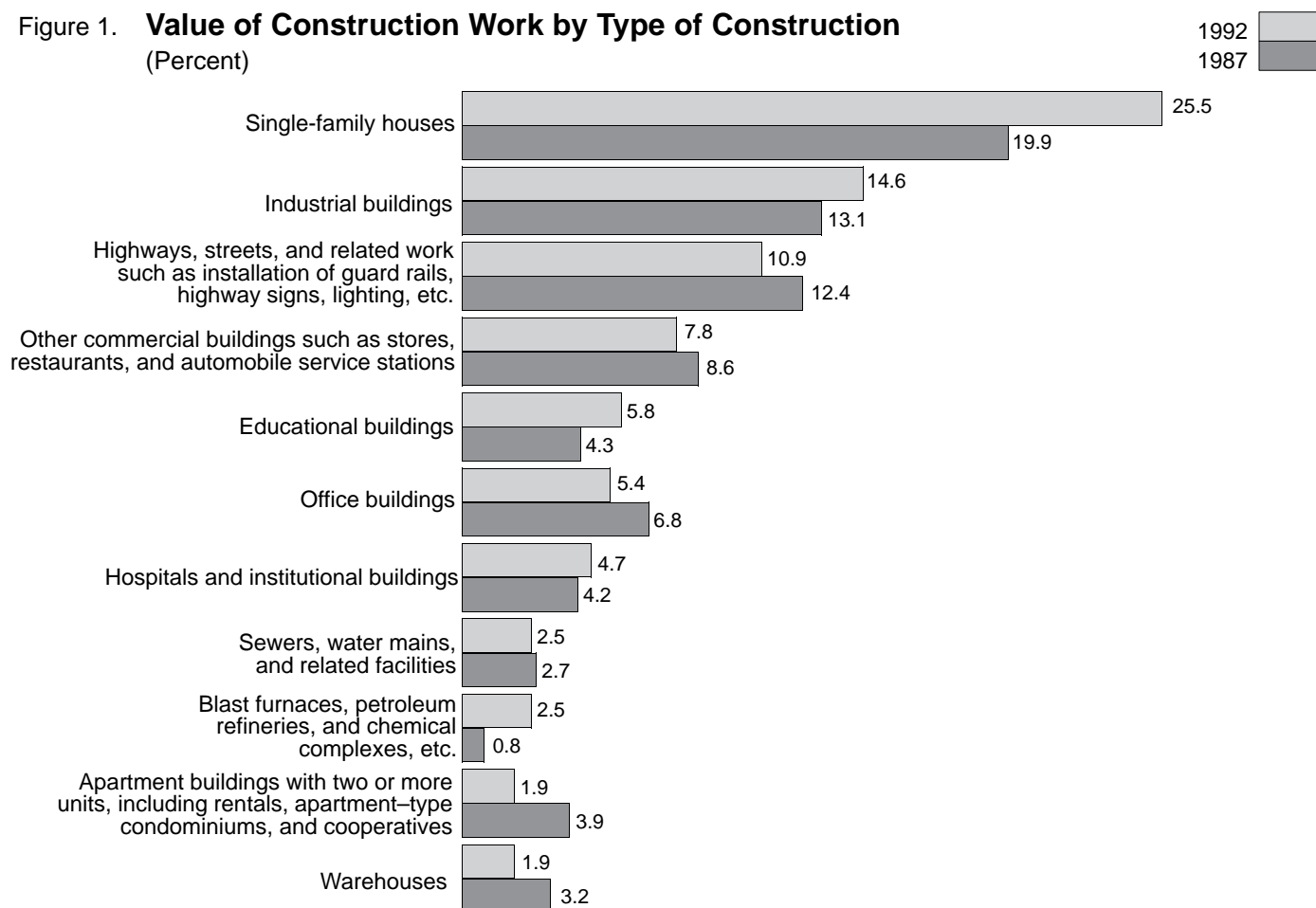


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

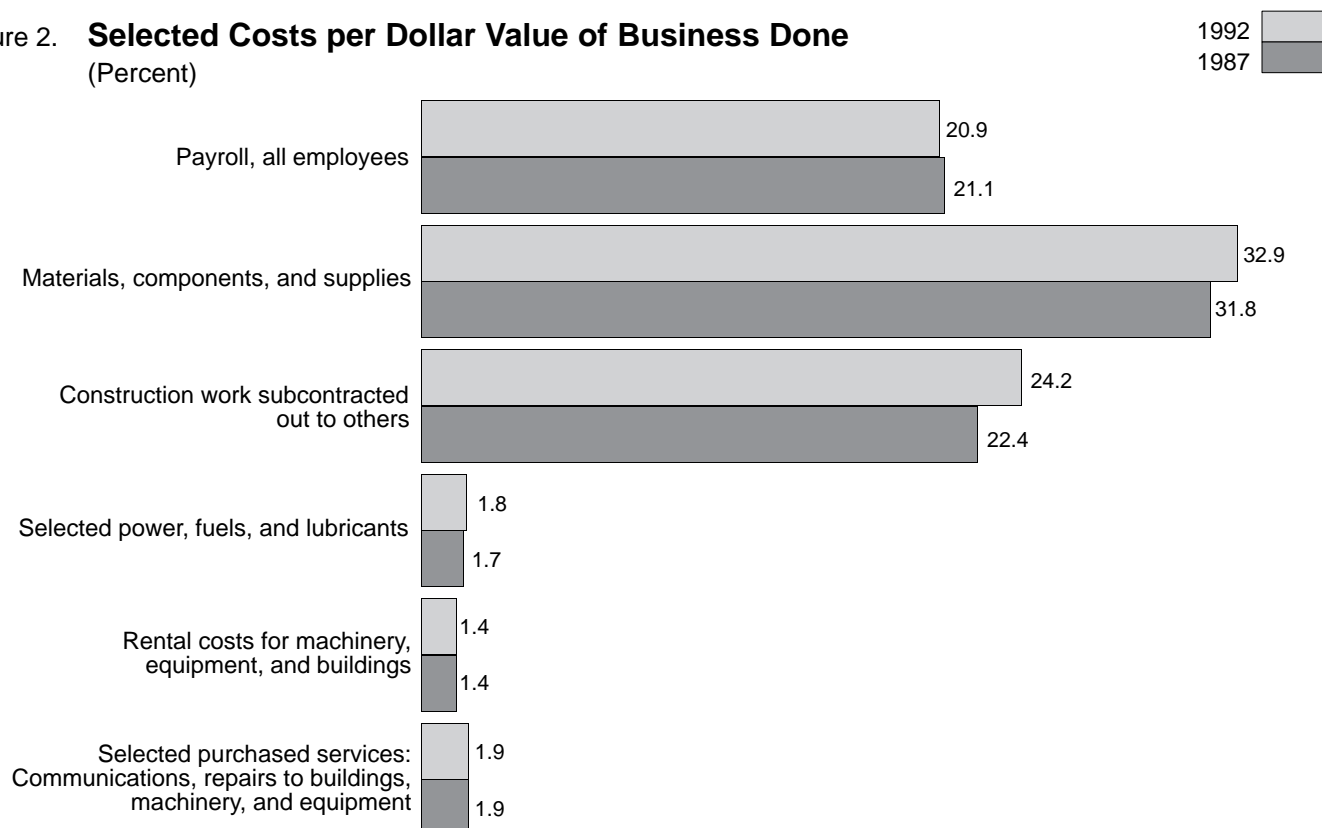


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	31 512	27 438	63 778	7 152 804	24 175	23 781	642 013	7 337	3 657	63 778	6 510 791	1	1
15	Building construction—General contractors and operative builders ----	5 586	4 207	15 662	2 864 454	3 596	3 296	248 869	1 990	911	15 662	2 615 585	2	3
16	Heavy construction other than building construction—contractors -----	1 188	697	11 905	1 408 291	553	521	16 116	635	176	11 905	1 392 175	3	2
17	Special trade contractors -----	24 738	22 534	36 212	2 880 059	20 026	19 964	377 028	4 712	2 570	36 212	2 503 031	1	1
1711	Plumbing, heating, and air-conditioning --	2 875	2 237	9 338	786 542	1 783	1 746	51 833	1 092	491	9 338	734 709	2	2
1731	Electrical work -----	2 073	1 686	6 355	484 771	1 474	1 445	26 533	599	241	6 355	458 238	3	3
	1987													
15, 16, 17	Construction industries² -----	31 572	26 563	55 761	5 718 255	25 261	24 929	914 081	6 311	1 634	55 761	4 804 174	1	1
15	Building construction—General contractors and operative builders ----	6 493	4 893	13 289	2 205 810	4 893	4 561	343 554	1 600	332	13 289	1 862 256	2	3
16	Heavy construction other than building construction—contractors -----	995	490	9 727	1 043 326	435	416	15 098	560	74	9 727	1 028 228	3	2
17	Special trade contractors -----	23 495	20 619	32 625	2 354 735	19 391	19 406	452 639	4 104	1 213	32 625	1 902 096	2	1
1711	Plumbing, heating, and air-conditioning --	2 681	1 984	8 161	612 444	1 736	1 725	63 229	945	259	8 161	549 215	3	3
1731	Electrical work -----	2 064	1 594	5 539	369 341	1 463	1 449	36 045	601	145	5 539	333 296	3	3

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	7 337	63 778	50 354	1 363 834	982 150	6 359 330	4 784 223	2 682 035
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	1 198	4 429	3 227	66 642	42 679	530 506	383 281	193 093
1522	Other residential buildings -----	68	577	478	10 540	7 524	61 334	41 035	23 563
1531	Operative builders -----	196	1 718	646	51 489	13 651	604 805	350 382	153 524
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	131	2 907	2 292	67 949	48 578	361 374	170 550	97 404
1542	Nonresidential buildings, n.e.c. -----	398	6 031	4 643	142 134	95 883	996 866	482 671	243 514
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	208	4 973	4 210	125 218	93 581	681 319	529 503	258 888
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	24	714	607	22 027	17 315	108 917	84 639	43 330
1623	Water, sewer, and utility lines -----	162	2 442	1 958	51 568	38 195	180 577	160 204	105 663
1629	Heavy construction, n.e.c. -----	240	3 776	3 072	89 380	66 569	380 965	321 751	210 124
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	1 092	9 338	7 244	197 854	144 904	720 106	642 480	343 068
1721	Painting and paper hanging -----	361	2 124	1 796	32 709	25 979	102 628	88 524	59 773
1731	Electrical work -----	599	6 355	5 088	154 505	117 480	450 330	435 106	257 145
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	361	2 550	2 309	44 630	39 327	119 650	115 083	76 787
1742	Plastering, drywall, and insulation work -----	191	2 669	2 251	54 944	42 640	159 182	147 183	96 659
1743	Terrazzo, tile, marble, and mosaic work -----	65	295	240	6 986	4 764	22 228	21 861	12 937
175	Carpentry and floor work:								
1751	Carpentry -----	449	1 631	1 382	25 626	20 206	103 909	92 089	57 146
1752	Floor laying and other floor work -----	123	621	474	10 221	7 557	45 697	44 186	23 037
1761	Roofing, siding, and sheet metal work -----	384	3 125	2 474	58 911	41 676	206 234	193 428	113 635
1771	Concrete work -----	336	2 232	1 853	36 673	29 537	128 096	113 479	67 505
1781	Water well drilling -----	24	77	61	1 033	850	4 211	(D)	2 510
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	31	526	413	13 863	10 439	40 276	37 786	27 910
1793	Glass and glazing work -----	64	451	326	9 529	6 449	33 477	32 982	16 729
1794	Excavation work -----	248	1 082	902	20 271	16 579	90 537	81 475	58 009
1795	Wrecking and demolition work -----	9	81	65	1 601	1 297	6 017	(D)	3 720
1796	Installing building equipment, n.e.c. -----	73	1 556	1 203	40 642	29 124	121 349	112 099	75 429
1799	Special trade contractors, n.e.c. -----	303	1 497	1 141	26 890	19 368	98 740	92 581	60 933

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
2 253 649	1 575 107	1 601 057	91 551	129 725	1 043 879	55 761	4 603 454	2 060 016	1	1	4	15, 16, 17
												15
196 447	147 225	22 189	2 087	4 381	29 778	2 797	241 910	87 614	7	9	20	152
17 612	20 299	294	428	*509	2 697	990	105 280	36 244	17	18	46	1521
212 984	254 423	(S)	906	4 729	43 898	1 578	353 058	80 367	9	8	12	1531
(D)	190 824	21 134	3 833	4 487	31 880	2 493	318 885	99 086	6	7	31	154
255 101	514 195	32 854	9 152	12 692	61 477	5 431	726 998	204 885	3	3	7	1541
												1542
												16
301 448	151 816	115 644	18 058	33 811	309 898	4 455	568 250	270 106	3	2	5	1611
42 208	24 278	14 797	1 916	3 024	30 044	821	88 839	29 498	1	(Z)	3	162
57 395	20 373	29 596	6 927	10 117	69 598	2 250	169 508	90 438	5	5	14	1622
117 439	59 214	34 419	5 295	10 747	117 015	2 201	162 468	91 124	7	8	17	1623
												1629
												17
314 016	77 625	381 491	10 388	10 619	76 850	8 161	543 223	277 988	2	2	10	1711
29 211	14 104	37 244	1 482	1 757	13 378	1 732	79 006	57 997	7	6	32	1721
185 868	15 224	272 254	5 407	6 726	49 268	5 539	329 504	182 360	3	3	18	1731
38 320	4 567	90 156	2 345	2 193	12 221	2 094	75 140	48 133	5	4	29	174
54 804	11 999	121 522	1 657	1 697	13 496	3 232	168 467	95 692	5	5	22	1741
8 937	367	18 408	159	231	2 181	185	14 344	8 245	8	8	2	1742
												1743
37 722	11 820	40 750	(S)	1 775	7 465	1 362	60 702	35 563	7	7	17	175
21 346	1 510	22 665	493	*1 005	3 828	282	11 568	7 438	13	16	63	1751
86 352	12 807	107 490	3 020	5 512	34 731	2 684	149 923	82 619	6	4	28	1751
47 087	14 617	56 711	4 083	2 539	27 533	2 467	122 351	68 648	6	6	17	1761
(D)	(D)	869	126	169	1 448	70	2 825	1 497	(Z)	(D)	(Z)	1771
												1781
(D)	2 490	28 974	1 339	531	8 845	736	54 999	35 287	12	6	2	179
19 030	*495	25 963	381	450	3 937	439	33 536	18 591	10	11	37	1791
25 532	9 061	48 830	6 988	3 930	34 833	1 163	76 900	51 518	9	6	29	1793
(D)	(D)	(D)	(D)	(S)	2 836	52	2 912	2 508	(Z)	(D)	(S)	1794
38 519	9 250	39 862	2 560	2 270	20 724	1 085	71 052	51 755	4	2	(Z)	1795
36 548	6 159	(D)	(D)	*3 652	34 022	1 342	65 373	41 137	10	11	53	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	7 337	6 311	5 967	7 440	1	1	2	3
Proprietors and working partners.....	3 657	1 634	2 259	4 989	2	6	4	5
All employees**	63 778	55 761	45 497	55 757	1	1	1	1
Construction workers:								
March.....	45 506	40 416	33 703	39 718	1	1	2	2
May	50 903	45 647	38 693	50 168	1	1	2	2
August	54 176	49 041	39 563	53 071	1	1	2	2
November.....	50 829	45 663	36 863	49 509	2	1	1	2
Average.....	50 354	45 192	37 816	48 150	1	1	1	2
Other employees:								
March.....	13 257	10 330	7 596	7 005	2	2	2	2
May	13 494	10 379	(NA)	(NA)	2	2	(NA)	(NA)
August	13 415	10 759	(NA)	(NA)	2	2	(NA)	(NA)
November.....	13 532	10 831	(NA)	(NA)	2	2	(NA)	(NA)
Average.....	13 425	10 575	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	1 363 834	1 014 124	701 897	600 076	1	1	1	1
Payroll, construction workers	982 150	759 232	542 534	489 408	1	1	1	1
Payroll, other employees	381 684	254 891	159 362	110 669	1	2	1	1
First-quarter payroll, all employees	290 941	213 799	155 112	110 452	1	1	1	1
Fringe benefits, all employees	302 847	205 432	124 998	100 888	1	1	1	1
Legally required expenditures.....	205 317	145 873	97 502	68 087	1	1	1	1
Voluntary expenditures.....	97 530	59 559	27 495	32 801	2	1	2	1
Dollar value of business done	6 510 791	4 804 174	2 831 665	2 493 404	1	1	1	1
Value of construction work	6 359 330	4 603 454	2 744 178	2 404 759	1	1	1	1
Value of construction work subcontracted in from others	1 601 057	1 074 589	655 468	513 307	2	3	2	2
Other business receipts	151 461	141 962	88 645	88 645	4	3	3	5
Net value of construction†	4 784 223	3 527 907	2 196 161	1 944 503	1	1	1	1
Value added††	2 682 035	2 060 016	1 316 744	1 100 065	1	1	1	1
Selected costs	3 828 756	2 685 401	1 497 467	1 363 955	1	2	1	2
Materials, components, and supplies	2 139 347	1 526 688	875 984	854 928	1	2	1	2
Construction work subcontracted out to others	1 575 107	1 075 547	548 017	460 256	3	2	2	2
Selected power, fuels, and lubricants	114 302	83 185	73 466	48 771	2	2	2	2
Electricity.....	16 811	9 673	8 392	4 978	3	2	3	3
Natural gas	6 034	2 817	4 094	1 915	4	4	2	6
Gasoline and diesel fuel	84 135	65 376	56 724	35 991	2	2	2	2
On highway use.....	57 185	41 722	(NA)	(NA)	2	3	(NA)	(NA)
Off highway use.....	26 950	23 654	(NA)	(NA)	4	3	(NA)	(NA)
Other, including lubricating oils and greases.....	7 322	5 317	4 255	5 887	5	4	4	4
Rental cost for machinery, equipment, and buildings	91 551	69 491	43 340	32 811	4	3	2	1
For machinery and equipment	67 741	52 235	35 235	28 282	5	4	2	1
For buildings.....	23 809	17 255	8 104	4 529	4	4	4	4
Selected purchased services	120 887	90 103	59 702	50 379	3	2	2	2
Communication services	34 398	19 068	12 690	9 925	7	3	2	2
Repairs to buildings and other structures	7 368	4 763	2 633	2 261	7	9	5	8
Repairs to machinery and equipment	79 120	66 271	44 379	38 194	3	3	2	2
Ownership of construction projects:								
Value of construction work	6 359 330	4 603 454	2 744 178	2 404 759	1	1	1	1
Government owned	1 756 053	1 276 638	763 478	637 474	2	3	3	1
Federal	400 498	384 925	(NA)	(NA)	5	5	(NA)	(NA)
State and local	1 355 555	891 712	(NA)	(NA)	3	3	(NA)	(NA)
Privately owned	4 603 278	3 326 816	1 980 700	1 767 285	2	2	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	974 090	734 435	3	3
Capital expenditures, other than land -----	129 725	125 516	4	3
New -----	95 311	90 371	4	4
Used -----	34 414	35 144	7	5
Retirements and disposition of depreciable assets -----	59 935	36 021	8	4
End-of-year gross book value of depreciable assets -----	1 043 879	823 930	2	3
Depreciation charges during year -----	116 605	94 205	4	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	144 848	144 971	7	8
Capital expenditures, other than land -----	14 425	18 662	9	7
New buildings and other structures -----	9 905	13 681	11	8
Used buildings and other structures -----	4 520	4 980	19	11
Retirements and disposition of depreciable assets -----	6 802	2 846	6	23
End-of-year gross book value of depreciable assets -----	152 471	160 788	7	7
Depreciation charges during year -----	10 594	11 134	8	8
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	829 241	589 463	3	3
Capital expenditures, other than land -----	115 299	106 853	4	4
New machinery and equipment, including automobiles and trucks -----	85 406	76 689	4	4
New automobiles and trucks, intended primarily for highway use -----	26 739	28 006	6	5
Used machinery and equipment, including automobiles and trucks -----	29 894	30 164	8	6
Retirements and disposition of depreciable assets -----	53 133	33 175	9	4
End-of-year gross book value of depreciable assets -----	891 408	663 141	2	3
Depreciation charges during year -----	106 010	83 071	4	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	7 337	1
Value of construction work	6 359 330	1
Establishments with inventories:		
Number	1 968	3
Value of construction work	2 445 661	2
Inventories ¹ :		
End of 1992, materials and supplies	100 241	17
End of 1991, materials and supplies	73 825	14
Establishments with no inventories:		
Number	2 561	3
Value of construction work	2 432 302	2
Establishments not reporting:		
Number	2 809	3
Value of construction work	1 481 367	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	7 337	(S)	1 509	884	469	136	54	9	(S)	—	
All employees** -----	63 778	7 716	9 795	11 577	13 794	9 135	7 791	3 971	(D)	—	
Payroll, all employees -----	1 363 834	107 723	156 639	218 189	321 876	225 889	227 063	106 456	(D)	—	
Dollar value of business done -----	6 510 791	787 087	787 128	972 656	1 402 246	968 852	984 739	608 084	(D)	—	
Value of construction work -----	6 359 330	773 504	771 895	953 950	1 368 367	941 853	973 510	576 251	(D)	—	
Net value of construction work† -----	4 784 223	611 280	628 205	743 687	1 057 854	697 655	735 582	309 960	(D)	—	
Value added†† -----	2 682 035	342 283	338 842	438 357	617 797	420 532	377 473	146 751	(D)	—	
Cost of materials, components, supplies, and fuels -----	2 253 649	282 579	304 597	324 036	473 936	304 122	369 338	195 042	(D)	—	
Cost of construction work subcontracted out to others -----	1 575 107	162 224	143 689	210 263	310 513	244 198	237 928	266 291	—	—	
Rental cost for machinery, equipment, and buildings -----	91 551	(S)	10 327	14 551	26 957	16 440	12 804	3 289	—	—	
Capital expenditures, other than land -----	129 725	16 647	12 243	19 804	23 923	19 478	30 033	7 596	(D)	—	
End-of-year gross book value of depreciable assets -----	1 043 879	(S)	122 477	144 499	222 522	169 863	214 503	71 915	(D)	—	
1987											
All employees** -----	55 761	(S)	8 128	10 352	14 286	7 588	6 526	1 847	—	—	
Value of construction work -----	4 603 454	(S)	463 807	783 166	1 196 880	742 160	879 587	(D)	—	—	
Value added†† -----	2 060 016	(S)	227 751	362 995	558 300	315 337	281 868	80 672	—	—	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	4	6	5	3	(Z)	(Z)	(Z)	(D)	—	
Net value of construction work† -----	1	7	6	5	3	(Z)	(Z)	(Z)	(D)	—	
Capital expenditures, other than land -----	4	16	15	13	8	(Z)	(Z)	(Z)	(D)	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	7 337	(S)	(S)	(S)	1 903	1 197	840	728	263	125	99
All employees** -----	63 778	(S)	(S)	(S)	6 209	7 116	7 902	11 791	8 178	6 882	12 677
Payroll, all employees -----	1 363 834	(S)	(S)	(S)	74 489	103 933	142 366	253 356	196 677	177 197	386 956
Dollar value of business done -----	6 510 791	(S)	(S)	(S)	311 825	418 497	593 209	1 112 262	902 273	859 161	2 203 582
Value of construction work -----	6 359 330	(S)	(S)	(S)	308 278	406 735	582 478	1 090 682	880 776	845 386	2 135 600
Net value of construction work† -----	4 784 223	(S)	(S)	(S)	280 886	355 945	510 056	891 468	708 505	613 264	1 322 845
Value added†† -----	2 682 035	(S)	(S)	(S)	170 831	206 205	290 506	498 038	418 750	359 900	674 064
Cost of materials, components, supplies, and fuels -----	2 253 649	(S)	(S)	(S)	113 601	161 501	230 280	415 010	311 251	267 139	716 762
Cost of construction work subcontracted out to others -----	1 575 107	(S)	(S)	(S)	27 393	50 790	72 422	199 214	172 271	232 122	812 756
Rental cost for machinery, equipment, and buildings -----	91 551	(S)	(S)	(S)	3 516	6 036	9 176	14 701	18 083	16 986	21 326
Capital expenditures, other than land -----	129 725	(S)	(S)	(S)	7 694	11 441	10 755	21 839	15 617	14 556	45 100
End-of-year gross book value of depreciable assets -----	1 043 879	(S)	(S)	(S)	46 050	91 267	89 793	169 323	127 046	143 473	355 090
1987											
All employees** -----	55 761	(S)	(S)	(S)	(S)	6 539	7 256	11 093	7 066	6 556	7 784
Value of construction work -----	4 603 454	(S)	(S)	(S)	(S)	333 455	470 921	845 622	658 135	738 516	1 204 933
Value added†† -----	2 060 016	(S)	(S)	(S)	(S)	177 117	238 202	404 647	293 459	328 088	421 826
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	(S)	6	7	6	4	4	(Z)	(Z)
Net value of construction work† -----	1	(S)	(S)	(S)	5	7	6	5	6	2	1
Capital expenditures, other than land -----	4	(S)	(S)	(S)	17	17	17	14	9	1	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

KY-10 KENTUCKY

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	6 359 330	3 996 396	1 373 613	813 412	1	2	2	2
Building construction	4 555 904	2 950 351	1 082 340	523 213	2	2	2	3
Single-family houses	1 621 199	1 308 271	183 186	129 742	4	5	6	7
Single-family houses, detached	1 522 408	1 231 055	171 145	120 208	4	5	6	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	98 791	77 216	12 041	9 534	7	7	14	10
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	120 854	54 508	44 186	22 160	8	13	10	9
Other residential buildings, including hotels, motels, and tourist cabins	38 932	18 321	9 919	10 693	11	21	23	5
Office buildings	341 069	200 393	106 036	34 640	4	5	7	6
Other commercial buildings such as stores, restaurants, and automobile service stations	493 739	283 220	132 414	78 106	4	4	6	7
Industrial buildings and warehouses	1 046 104	553 992	321 634	170 479	2	2	5	4
Industrial buildings	926 742	475 352	295 635	155 755	2	1	5	4
Warehouses	119 362	78 640	25 998	14 723	5	7	9	10
Religious buildings	89 325	51 530	26 623	11 172	5	5	7	10
Educational buildings	371 813	224 057	116 393	31 362	4	5	5	15
Hospitals and institutional buildings	299 778	163 987	117 167	18 623	8	14	4	6
Amusement, social, and recreational buildings, indoors	32 013	21 268	7 766	2 979	13	13	31	28
Other nonresidential buildings	101 077	70 806	17 015	13 256	12	15	8	18
Nonbuilding construction	1 627 517	1 046 045	291 273	290 199	2	3	3	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	691 944	422 881	124 964	144 098	2	1	5	5
Private driveways and parking areas	31 896	15 761	4 940	11 195	16	18	18	27
Bridges, tunnels, and elevated highways	117 061	92 775	17 094	7 192	2	2	1	18
Conservation and development construction	92 124	76 402	(S)	7 216	27	32	(S)	14
Power and communication transmission lines, towers, and related facilities	84 382	53 285	19 682	11 415	7	9	3	13
Sewers, water mains, and related facilities	160 761	134 830	17 156	8 775	4	5	18	10
Sewers, sewer lines, septic systems, and related facilities	88 567	75 539	8 684	(S)	4	3	16	(S)
Water mains and related facilities	72 195	59 291	8 472	4 432	8	8	30	13
Pipeline construction other than sewer or water lines	48 402	31 705	10 318	6 379	13	14	16	11
Blast furnaces, petroleum refineries, chemical complexes, etc.	160 399	92 353	20 469	47 577	2	1	3	6
Power plants	40 085	13 492	* 4 588	22 005	13	26	43	10
Sewage treatment and water treatment plants	82 886	48 290	30 249	4 347	4	4	8	10
Other nonbuilding construction	117 577	64 271	33 305	20 001	10	11	8	26
Construction work, n.s.k.	175 910	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
1987								
Value of construction work	4 603 454	2 955 062	852 182	549 602	1	2	2	2
Building construction	3 183 604	2 152 735	664 888	365 981	2	2	3	3
Single-family houses	916 902	678 022	141 628	97 251	4	5	6	7
Single-family houses, detached	814 372	589 175	132 991	92 205	5	6	6	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	102 530	88 847	8 637	5 045	14	16	17	15
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	178 783	121 250	42 395	15 137	8	10	14	9
Other residential buildings, including hotels, motels, and tourist cabins	76 753	44 240	21 625	10 887	5	4	13	10
Office buildings	311 862	200 747	78 866	32 248	3	3	6	8
Other commercial buildings such as stores, restaurants, and automobile service stations	394 101	275 437	70 952	47 711	3	3	4	7
Industrial buildings and warehouses	751 603	470 168	163 435	118 000	2	3	5	5
Industrial buildings	602 428	354 839	142 586	105 003	3	3	6	6
Warehouses	149 175	115 329	20 849	12 996	4	5	9	6
Religious buildings	54 496	34 386	14 634	5 475	7	10	8	11
Educational buildings	199 551	120 524	62 249	16 776	6	8	11	17
Hospitals and institutional buildings	192 784	123 279	55 106	14 398	3	3	4	12
Amusement, social, and recreational buildings, indoors	20 768	14 728	4 625	1 414	8	10	7	4
Other nonresidential buildings	86 001	69 954	9 373	6 684	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	1 173 243	802 327	187 293	183 622	2	2	6	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	571 255	382 524	81 400	107 331	2	2	2	2
Private driveways and parking areas	35 168	19 900	6 649	8 618	15	15	25	18
Bridges, tunnels, and elevated highways	94 976	79 550	9 918	5 507	3	3	(Z)	5
Power and communication transmission lines, towers, and related facilities	57 024	38 298	11 593	7 133	8	7	29	22
Sewers, water mains, and related facilities	123 962	96 799	11 546	15 616	7	8	20	22
Sewers, sewer lines, septic systems, and related facilities	72 671	53 879	7 560	11 231	8	9	27	29
Water mains and related facilities	51 291	42 920	3 986	4 384	9	10	10	13
Pipeline construction other than sewer or water lines	32 757	20 235	5 482	7 040	5	6	2	17
Blast furnaces, petroleum refineries, chemical complexes, etc.	37 246	17 616	8 681	10 949	10	15	18	6
Sewage treatment and water treatment plants	68 543	43 870	21 151	3 521	5	5	6	13
Other nonbuilding construction	152 312	103 535	30 873	17 907	13	16	13	19
Construction work, n.s.k.	246 605	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	7 337	50 354	45 506	50 903	54 176	50 829	1	1	1	1	1	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	1 198	3 227	3 045	3 339	3 454	3 069	4	7	7	7	7	7
1522	Other residential buildings -----	68	478	423	540	498	451	23	18	18	17	20	18
1531	Operative builders -----	196	646	611	663	667	641	14	9	9	8	8	10
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	131	2 292	2 141	2 102	2 495	(S)	15	6	5	6	6	(S)
1542	Nonresidential buildings, n.e.c. ----	398	4 643	4 459	4 560	4 723	4 828	8	3	4	3	3	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	208	4 210	2 860	4 394	5 026	4 559	9	3	2	3	3	4
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	24	607	512	594	661	662	31	1	(Z)	(Z)	(Z)	3
1623	Water, sewer, and utility lines -----	162	1 958	1 890	1 886	1 972	2 083	11	5	7	5	4	5
1629	Heavy construction, n.e.c. -----	240	3 072	2 746	3 246	3 210	3 088	11	8	5	8	7	19
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 092	7 244	6 938	7 291	7 624	7 124	3	2	3	2	2	3
1721	Painting and paper hanging -----	361	1 796	1 486	1 840	2 123	1 737	6	8	9	7	8	8
1731	Electrical work -----	599	5 088	4 853	5 101	5 560	4 838	4	3	3	3	3	3
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	361	2 309	2 167	2 384	2 409	2 278	3	5	5	4	6	9
1742	Plastering, drywall, and insulation work -----	191	2 251	2 157	2 316	2 320	2 210	8	4	5	3	5	6
1743	Terrazzo, tile, marble, and mosaic work -----	65	240	217	228	255	258	16	8	7	6	9	12
175	Carpentry and floor work:												
1751	Carpentry -----	449	1 382	1 272	1 388	1 516	1 352	6	7	8	7	8	8
1752	Floor laying and other floor work --	123	474	429	490	533	445	13	12	12	12	12	12
1761	Roofing, siding, and sheet metal work -----	384	2 474	2 334	2 462	2 569	2 531	5	6	6	6	7	6
1771	Concrete work -----	336	1 853	1 402	1 954	2 084	1 972	6	6	8	6	7	6
1781	Water well drilling -----	24	61	57	62	63	60	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	31	413	368	389	426	469	14	13	10	9	15	21
1793	Glass and glazing work -----	64	326	316	315	327	348	9	10	9	9	9	12
1794	Excavation work -----	248	902	728	999	986	895	9	9	10	9	9	9
1795	Wrecking and demolition work -----	9	65	74	68	60	59	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1796	Installing building equipment, n.e.c. -----	73	1 203	1 019	1 081	1 396	1 315	18	5	3	2	8	7
1799	Special trade contractors, n.e.c. ----	303	1 141	1 004	1 212	1 221	1 128	9	10	11	10	10	10

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.7	21.4	126.3	.214	.354	.248	.252	.014
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.7	15.0	164.4	.126	.370	.278	.042	.004
1522	Other residential buildings -----	8.5	18.3	128.3	.172	.287	.331	.005	.007
1531	Operative builders -----	8.8	30.0	936.2	.085	.352	.421	(S)	.001
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	22.1	23.4	157.7	.188	(D)	.528	.058	.011
1542	Nonresidential buildings, n.e.c. -----	15.2	23.6	214.7	.143	.256	.516	.033	.009
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	23.9	25.2	161.8	.184	.442	.223	.170	.027
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	29.8	30.9	179.4	.202	.388	.223	.136	.018
1623	Water, sewer, and utility lines -----	15.0	21.1	92.2	.286	.318	.113	.164	.038
1629	Heavy construction, n.e.c. -----	15.7	23.7	124.0	.235	.308	.155	.090	.014
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.6	21.2	99.4	.275	.436	.108	.530	.014
1721	Painting and paper hanging -----	5.9	15.4	57.1	.319	.285	.137	.363	.014
1731	Electrical work -----	10.6	24.3	88.5	.343	.413	.034	.605	.012
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	7.1	17.5	51.8	.373	.320	.038	.753	.020
1742	Plastering, drywall, and insulation work -----	14.0	20.6	70.7	.345	.344	.075	.763	.010
1743	Terrazzo, tile, marble, and mosaic work -----	4.5	23.7	92.6	.314	.402	.017	.828	.007
175	Carpentry and floor work:								
1751	Carpentry -----	3.6	15.7	75.2	.247	.363	.114	.392	(S)
1752	Floor laying and other floor work -----	5.0	16.5	96.4	.224	.467	.033	.496	.011
1761	Roofing, siding, and sheet metal work -----	8.1	18.9	83.4	.286	.419	.062	.521	.015
1771	Concrete work -----	6.7	16.4	69.1	.286	.368	.114	.443	.032
1781	Water well drilling -----	3.2	13.4	69.0	.245	(D)	(D)	.206	.030
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	17.1	26.4	97.5	.344	(D)	.062	.719	.033
1793	Glass and glazing work -----	7.0	21.1	102.7	.285	.568	.015	.776	.011
1794	Excavation work -----	4.4	18.7	100.4	.224	.282	.100	.539	.077
1795	Wrecking and demolition work -----	9.0	19.8	92.6	.266	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	21.4	26.1	100.9	.335	.317	.076	.328	.021
1799	Special trade contractors, n.e.c. -----	4.9	18.0	86.5	.272	.370	.062	(D)	(D)

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CINCINNATI-HAMILTON, OH-KY-IN CMSA											
15,16, 17	Construction industries	4 374	40 410	1 016 316	4 615 778	3 394 346	1 905 131	1 571 074	1 221 432	70 455	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	674	2 936	52 646	473 452	342 687	161 758	183 863	130 766	2 798	6	8
1522	Other residential buildings	15	261	5 372	31 117	19 902	11 301	9 188	11 215	(D)	2	(Z)
1531	Operative builders	195	1 719	60 376	731 815	410 518	176 046	267 361	321 298	5 112	6	9
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	62	1 428	39 777	174 437	105 439	66 765	42 301	68 998	977	6	6
1542	Nonresidential buildings, n.e.c.	221	3 042	83 095	681 498	250 959	104 022	155 167	430 539	11 618	5	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	62	2 068	61 443	313 630	249 276	147 296	105 262	64 355	9 978	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	50	1 557	40 080	129 522	112 725	76 632	38 414	16 797	5 991	2	2
1629	Heavy construction, n.e.c.	50	1 006	31 507	116 217	103 463	68 354	36 554	12 755	3 056	3	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	612	5 896	160 380	537 601	475 109	275 699	205 522	62 492	7 404	2	2
1721	Painting and paper hanging.....	272	1 318	23 343	60 597	57 864	42 903	15 424	2 733	546	10	7
1731	Electrical work	380	3 818	101 957	277 207	264 496	161 367	107 060	12 711	2 578	3	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work.....	201	1 308	25 703	61 585	59 417	42 161	17 406	2 168	1 259	9	8
1742	Plastering, drywall, and insulation work	147	1 681	36 583	103 490	95 216	58 173	37 328	8 275	1 131	7	5
1743	Terrazzo, tile, marble, and mosaic work	54	323	6 761	19 843	(D)	11 503	7 933	(D)	(D)	18	(D)
175	Carpentry and floor work:											
1751	Carpentry	389	1 816	34 603	108 984	94 033	59 790	36 472	14 951	790	8	9
1752	Floor laying and other floor work ...	64	558	12 793	51 616	47 484	23 749	25 022	4 133	657	4	1
1761	Roofing, siding, and sheet metal work	218	1 649	37 422	121 358	113 220	68 132	47 091	8 138	1 583	6	4
1771	Concrete work	245	3 228	84 879	270 597	242 803	115 021	129 839	27 794	6 081	4	3
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	36	480	13 526	31 725	30 273	24 611	5 674	(S)	674	5	5
1793	Glass and glazing work	53	380	9 113	38 143	34 481	15 041	19 610	3 661	985	14	8
1794	Excavation work	132	766	16 284	59 281	54 713	41 297	13 919	4 568	2 847	9	9
1795	Wrecking and demolition work	9	106	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c. .	35	1 216	32 911	78 533	75 957	58 024	18 641	2 576	1 050	2	3
1799	Special trade contractors, n.e.c.	190	1 823	42 053	129 232	120 921	84 306	43 079	8 312	2 293	7	7
	Cincinnati, OH-KY-IN PMSA											
15,16, 17	Construction industries	3 644	33 505	827 482	3 806 813	2 743 906	1 550 055	1 267 287	1 062 907	59 338	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	581	2 666	46 772	416 785	300 528	143 587	159 844	116 257	2 385	7	9
1522	Other residential buildings	11	(D)	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1531	Operative builders	157	1 471	54 014	567 594	306 784	132 531	207 138	260 810	4 795	6	8
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	53	1 277	34 054	146 688	90 218	56 523	36 313	56 470	(D)	6	7
1542	Nonresidential buildings, n.e.c.	197	2 838	76 223	646 252	228 961	88 049	(D)	417 290	11 371	6	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	50	1 722	50 765	267 174	212 764	121 614	93 277	54 411	8 099	5	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	38	1 217	32 035	98 430	(D)	58 445	30 941	4 837	4 837	3	(D)
1629	Heavy construction, n.e.c.	39	888	(D)	105 821	95 212	62 453	34 204	10 610	2 819	3	2

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.											
	Cincinnati, OH—KY—IN PMSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	495	5 163	142 171	477 194	420 558	243 122	182 199	56 636	6 915	3	2
1721	Painting and paper hanging	240	1 147	19 624	50 904	48 380	35 726	13 116	2 524	440	12	8
1731	Electrical work	308	3 292	87 203	238 246	226 139	138 839	90 175	12 107	2 435	3	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	173	1 051	20 198	48 495	(D)	33 224	13 398	(D)	1 046	11	(D)
1742	Plastering, drywall, and insulation work	111	1 264	29 359	80 309	74 785	46 736	28 203	5 525	585	7	5
1743	Terrazzo, tile, marble, and mosaic work	43	260	5 605	(D)	16 576	(D)	6 759	(D)	(D)	15	14
175	Carpentry and floor work:											
1751	Carpentry	334	1 579	30 880	96 520	83 195	53 278	32 138	13 325	626	8	10
1752	Floor laying and other floor work	53	492	12 025	49 022	(D)	22 208	23 772	(D)	569	6	(D)
1761	Roofing, siding, and sheet metal work	185	1 432	31 933	102 335	94 224	58 339	37 854	8 111	1 458	7	5
1771	Concrete work	196	1 625	(D)	(D)	(D)	59 706	(D)	(D)	(D)	8	(D)
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	29	278	7 581	19 178	17 940	15 233	(S)	(S)	(D)	9	8
1793	Glass and glazing work	44	338	8 076	35 226	31 596	13 510	18 257	3 630	(D)	14	7
1794	Excavation work	108	615	12 608	47 903	43 866	33 120	11 168	4 037	2 109	11	11
1795	Wrecking and demolition work	9	106	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c. -	31	(D)	(D)	(D)	(D)	(D)	17 421	(D)	1 047	(D)	(D)
1799	Special trade contractors, n.e.c.	156	1 537	35 576	106 670	100 420	67 595	38 135	6 250	(D)	7	8
	Hamilton—Middletown, OH PMSA											
15,16,17	Construction industries	729	6 905	188 834	808 964	650 440	355 076	303 787	158 524	11 117	2	5
	(See appropriate State for SIC detail.)											
	LOUISVILLE, KY—IN MSA											
15,16,17	Construction industries	2 343	21 880	496 002	2 209 423	1 679 422	963 308	753 480	530 000	37 680	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	391	1 403	22 336	227 300	146 027	68 092	80 852	81 273	1 204	10	12
1522	Other residential buildings	25	175	4 127	19 822	13 737	8 449	5 289	6 085	(D)	28	16
1531	Operative builders	64	579	11 814	171 883	111 891	65 968	47 462	59 992	623	23	16
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	47	600	15 211	88 465	41 042	24 802	16 524	47 423	940	13	11
1542	Nonresidential buildings, n.e.c.	118	1 817	47 648	348 984	154 578	82 820	74 266	194 406	(D)	6	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	26	655	19 648	105 773	85 482	51 987	35 370	(S)	2 097	10	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	8	252	7 580	49 474	(D)	15 172	21 112	(D)	957	(Z)	(D)
1623	Water, sewer, and utility lines	33	777	19 261	75 107	63 154	36 842	27 921	11 952	3 010	2	1
1629	Heavy construction, n.e.c.	34	554	12 605	58 445	49 967	32 140	18 166	8 479	3 285	7	8

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	LOUISVILLE, KY-IN MSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	340	3 840	92 913	315 755	280 913	144 926	141 072	34 842	4 010	3	3
1721	Painting and paper hanging-----	168	856	13 901	51 775	41 792	27 752	14 419	9 983	629	11	8
1731	Electrical work -----	157	2 311	63 044	168 119	164 622	99 122	68 062	3 498	2 030	4	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	109	1 019	21 003	58 574	55 622	37 256	18 369	(S)	809	4	2
1742	Plastering, drywall, and insulation work -----	71	1 151	23 450	65 773	61 716	43 229	20 912	4 057	662	7	8
1743	Terrazzo, tile, marble, and mosaic work -----	19	170	4 815	13 783	13 718	8 130	5 597	65	150	10	6
175	Carpentry and floor work:											
1751	Carpentry -----	(S)	727	13 086	45 855	41 949	27 029	17 096	3 906	820	8	8
1752	Floor laying and other floor work ---	61	420	7 286	30 717	29 571	15 407	14 196	1 147	876	18	22
1761	Roofing, siding, and sheet metal work -----	148	1 438	29 994	98 643	89 545	53 421	40 886	9 098	915	8	7
1771	Concrete work -----	140	1 110	20 599	71 319	61 347	34 247	27 251	9 972	1 132	7	6
1781	Water well drilling -----	4	17	387	(D)	1 024	699	422	(D)	(D)	(Z)	(Z)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	13	265	7 446	15 932	13 980	14 159	4 845	1 952	(D)	11	7
1793	Glass and glazing work -----	11	186	4 576	14 437	14 338	7 793	6 875	99	108	(Z)	(Z)
1794	Excavation work -----	59	298	5 495	18 495	16 981	13 637	4 146	1 514	1 374	17	16
1795	Wrecking and demolition work -----	11	80	1 631	(D)	6 410	3 994	2 482	(D)	128	20	33
1796	Installing building equipment, n.e.c. -	25	596	13 873	47 043	(D)	19 373	26 286	(D)	339	3	(D)
1799	Special trade contractors, n.e.c.-----	85	585	12 274	40 027	39 084	26 862	13 602	(S)	3 125	13	16

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Mississippi. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 17,220 establishments in this State operating in the construction industries. These establishments accounted for \$3.6 billion in total dollar value of business done.

Most of the 17,220 construction establishments were small. Of the total, 13,282 were nonemployers, and over half of the employer establishments had less than 5 employees. The 1,525 construction establishments with 5 employees or more, while representing only 9 percent of all establishments, accounted for more than 76 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$3.22 billion in total dollar value of business done. Of this amount, \$3.15 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$710 million, leaving net value of construction work of \$2.4 billion. In addition, these establishments paid out \$1.3 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$1.3 billion. (See Introduction and appendixes for explanation of terms.)

There were 3,938 establishments with total employment averaging 34,553 during the year. Total payroll for 1992 was \$650 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 13,282 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$368 million. Most of these establishments, about 83 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

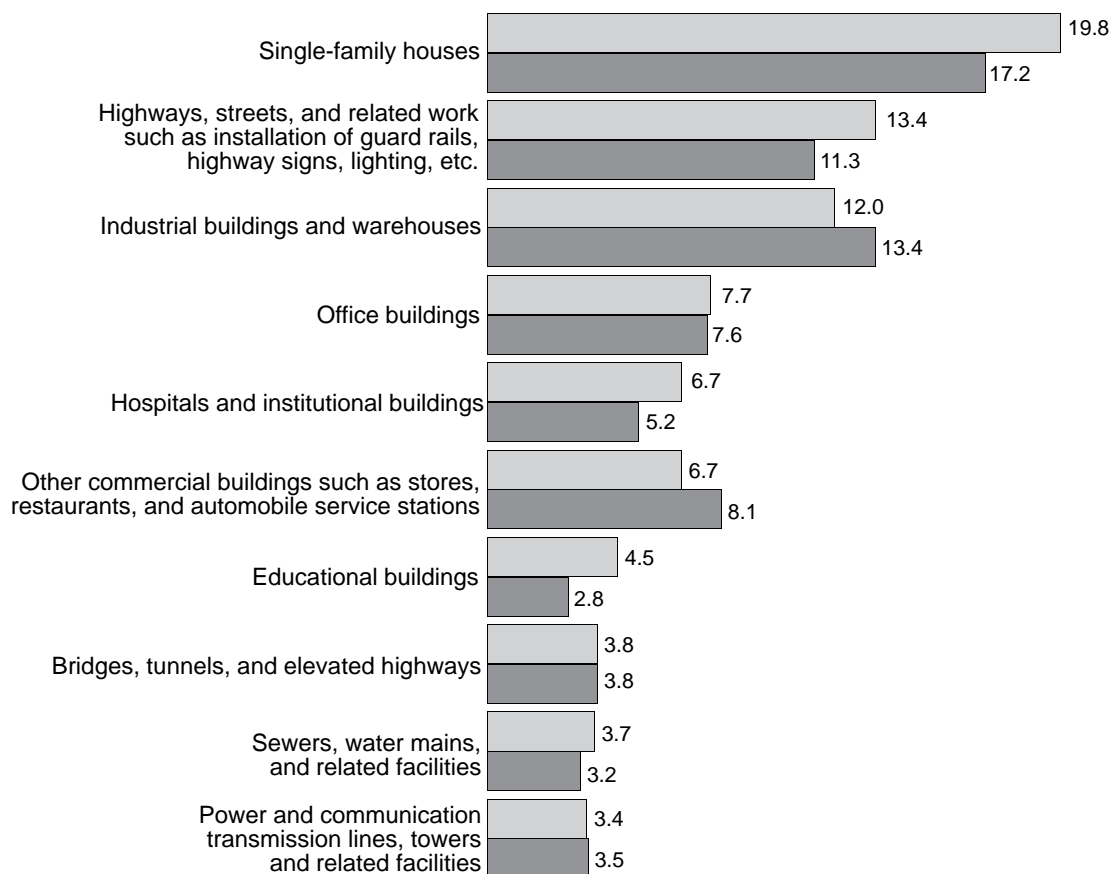




Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

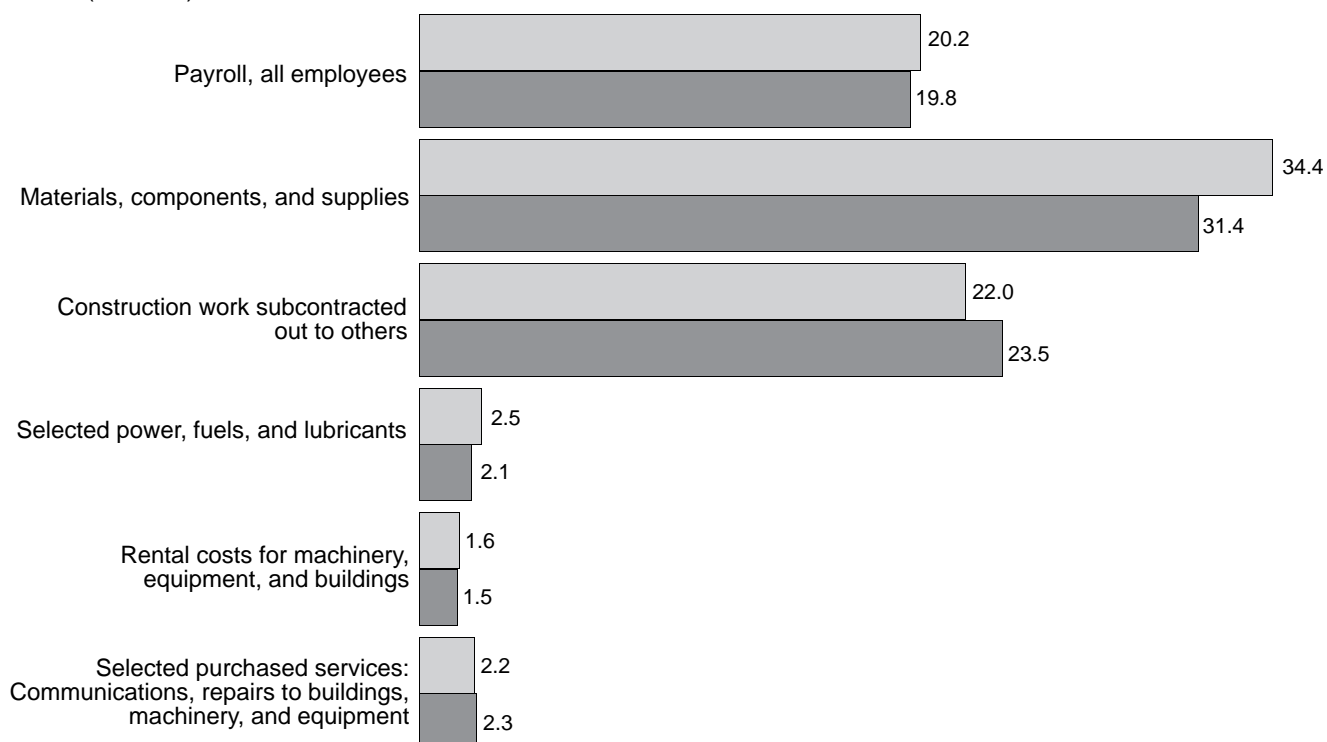


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	17 220	15 425	34 553	3 588 534	13 282	13 118	367 526	3 938	2 307	34 553	3 221 008	1	2
15	Building construction—General contractors and operative builders ----	2 949	2 287	8 996	1 379 098	1 836	1 704	141 787	1 113	583	8 996	1 237 311	3	4
16	Heavy construction other than building construction—contractors -----	782	508	9 258	922 731	387	371	14 894	395	(S)	9 258	907 837	2	2
17	Special trade contractors -----	13 489	12 630	16 298	1 286 705	11 059	11 043	210 845	2 430	1 587	16 298	1 075 860	2	2
1711	Plumbing, heating, and air-conditioning --	1 586	1 322	4 448	410 485	996	988	29 520	590	334	4 448	380 965	3	3
1731	Electrical work-----	1 113	971	2 581	180 084	772	767	15 152	341	204	2 581	164 932	5	5
	1987													
15, 16, 17	Construction industries² -----	17 342	14 419	32 450	3 153 869	13 482	13 334	520 037	3 860	1 085	32 450	2 633 842	1	2
15	Building construction—General contractors and operative builders ----	3 749	2 682	9 094	1 310 423	2 556	2 407	192 974	1 193	275	9 094	1 117 449	3	4
16	Heavy construction other than building construction—contractors -----	678	367	8 672	687 317	299	294	23 158	379	73	8 672	664 159	3	2
17	Special trade contractors -----	12 547	11 065	14 584	1 093 604	10 311	10 333	260 617	2 236	732	14 584	832 987	2	3
1711	Plumbing, heating, and air-conditioning --	1 542	1 159	3 757	300 768	1 001	1 001	38 359	541	158	3 757	262 409	4	4
1731	Electrical work-----	1 076	850	2 277	149 854	746	746	21 113	330	104	2 277	128 741	6	5

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	3 938	34 553	27 763	649 627	468 930	3 153 995	2 444 000	1 319 709
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	599	2 118	1 675	31 381	20 192	(S)	(S)	75 757
1522	Other residential buildings -----	37	416	349	5 412	4 022	29 203	20 177	12 498
1531	Operative builders -----	99	453	166	10 900	2 538	170 237	128 712	(S)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	125	2 034	1 643	34 339	23 536	201 276	131 981	79 724
1542	Nonresidential buildings, n.e.c. -----	253	3 975	2 994	76 689	49 485	570 681	294 184	131 124
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction -----	137	3 757	3 102	79 053	57 313	422 708	333 542	145 601
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	12	978	855	21 395	17 253	119 275	82 485	49 569
1623	Water, sewer, and utility lines -----	98	2 151	1 869	48 379	39 442	171 646	151 275	93 778
1629	Heavy construction, n.e.c. -----	148	2 373	1 911	47 844	34 482	170 521	153 356	94 256
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	590	4 448	3 411	95 013	67 970	371 878	331 500	169 903
1721	Painting and paper hanging -----	211	924	811	13 603	11 515	36 596	35 098	27 201
1731	Electrical work -----	341	2 581	2 038	50 424	38 223	161 764	154 691	98 715
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	147	600	560	6 743	6 037	(D)	15 146	(D)
1742	Plastering, drywall, and insulation work -----	101	1 149	970	20 171	16 021	60 687	56 156	34 168
1743	Terrazzo, tile, marble, and mosaic work -----	21	101	83	(D)	(S)	(D)	(D)	(D)
175	Carpentry and floor work:								
1751	Carpentry -----	175	677	563	10 463	7 849	42 707	37 633	18 705
1752	Floor laying and other floor work -----	52	164	131	2 155	1 588	8 107	7 818	4 667
1761	Roofing, siding, and sheet metal work -----	239	1 799	1 554	26 333	19 023	107 763	(D)	60 847
1771	Concrete work -----	136	1 113	933	18 093	14 174	66 492	61 472	39 429
1781	Water well drilling -----	33	372	284	7 068	5 139	30 789	29 150	16 424
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	28	333	282	5 545	4 306	22 192	19 595	11 471
1793	Glass and glazing work -----	27	156	89	2 170	1 379	8 493	8 440	3 806
1794	Excavation work -----	103	402	333	7 827	5 997	25 698	23 718	16 566
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	26	443	369	10 679	8 427	25 536	25 141	19 498
1799	Special trade contractors, n.e.c. -----	200	1 037	786	(D)	11 404	53 755	50 979	32 654

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
1 191 304	709 995	732 843	51 778	57 114	550 470	32 450	2 557 272	1 109 665	1	2	5	15, 16, 17
												15
(S) 7 679	(S) 9 026	8 086 *311	1 132 *180	(S) *268	(S) *2 127	2 359 436	170 528 66 271	71 139 18 085	9 31	(S) 29	(S) 46	152 1521 1522
63 274	41 526	(S)	(S)	*1 747	*9 969	789	174 143	57 413	17	24	52	1531
56 006 167 227	69 295 276 496	17 398 27 758	2 182 4 033	1 446 5 130	13 866 45 093	1 204 4 306	144 574 532 056	40 221 126 783	9 4	7 4	30 18	154 1541 1542
												16
202 655	89 166	129 018	13 454	13 881	145 096	3 369	298 284	153 945	4	5	5	1611
(D) 57 726 63 264	36 790 20 371 17 166	16 919 17 167 20 438	2 933 5 731 6 167	3 441 5 165 7 109	35 127 47 919 51 605	973 2 583 1 747	102 676 142 412 96 986	40 007 88 670 56 003	(Z) 5 6	(Z) 6 6	(Z) 15 27	162 1622 1623 1629
												17
170 684	40 378	192 325	5 042	4 811	32 737	3 757	259 435	129 664	3	3	19	1711
(D) 59 145	1 498 7 072	20 973 63 501	1 242 2 505	405 2 190	5 642 35 769	815 2 277	30 614 126 990	21 099 72 997	9 5	12 5	22 21	1721 1731
4 337 22 121 (S)	(D) 4 531 124	10 630 55 734 (S)	118 705 (D)	130 1 043 (S)	1 446 6 750 882	877 1 008 56	22 666 52 494 2 982	13 031 30 471 1 466	11 15 21	10 8 (D)	18 8 (S)	174 1741 1742 1743
19 722 (D)	5 075 289	23 570 2 995	(S) 47	355 20	4 978 849	723 (S)	27 141 (S)	15 103 (S)	15 5	13 4	27 17	175 1751 1752
45 434	(D)	44 166	1 036	1 392	19 737	1 439	83 340	41 832	11	(D)	22	1761
27 500	5 020	21 360	1 184	1 588	15 091	832	28 282	16 829	14	14	30	1771
13 864	1 639	1 088	146	861	17 936	389	25 398	12 382	16	9	8	1781
8 124 5 375 8 656	2 597 (S) 1 979	14 480 3 544 16 469	*485 (S) 1 131	*413 71 1 502	4 839 *2 442 (S)	481 74 572	21 031 (D) 3 277 36 696	12 946 3 277 22 947	16 16 22	16 10 16	44 38 38	179 1791 1793 1794
(D) 21 390	394 2 776	5 012 11 455	387 (D)	482 *1 729	(D) (D)	436 663	*81 41 979 40 077	2 675 25 837 26 048	— 10 14	— 8 12	— (Z) 49	1795 1796 1799

CONSTRUCTION—GEOGRAPHIC AREA SERIES

MISSISSIPPI MS—7

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	3 938	3 860	3 566	4 313	1	1	3	4
Proprietors and working partners.....	2 307	1 085	1 522	2 681	3	7	5	6
All employees**	34 553	32 450	37 278	34 137	1	1	1	2
Construction workers:								
March.....	24 925	24 409	30 570	27 045	2	2	1	2
May	27 358	26 743	32 771	30 856	1	2	2	2
August	29 952	28 602	33 583	31 980	1	2	2	2
November.....	28 816	26 841	31 823	28 680	1	2	1	2
Average	27 763	26 649	32 448	29 662	1	2	1	2
Other employees:								
March.....	6 687	5 737	4 795	4 409	2	2	3	3
May	6 678	5 774	(NA)	(NA)	2	2	(NA)	(NA)
August	6 834	5 892	(NA)	(NA)	2	2	(NA)	(NA)
November.....	6 960	5 801	(NA)	(NA)	2	2	(NA)	(NA)
Average	6 790	5 801	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	649 627	522 811	582 257	296 835	1	1	1	1
Payroll, construction workers	468 930	390 641	496 607	238 507	1	1	1	1
Payroll, other employees	180 697	132 170	85 650	58 328	2	2	2	2
First-quarter payroll, all employees	141 929	111 427	125 669	60 996	2	2	1	1
Fringe benefits, all employees	134 071	91 811	121 937	44 472	2	2	1	2
Legally required expenditures.....	99 100	71 745	83 256	32 378	2	2	1	2
Voluntary expenditures.....	34 971	20 066	38 681	12 094	3	3	1	1
Dollar value of business done	3 221 008	2 633 842	2 315 564	1 352 423	2	2	1	2
Value of construction work	3 153 995	2 557 272	2 253 837	1 301 403	2	2	1	2
Value of construction work subcontracted in from others	732 843	505 368	368 385	250 358	4	4	3	3
Other business receipts	67 012	55 872	50 464	51 020	6	8	3	4
Net value of construction†	2 444 000	1 937 885	1 880 305	1 059 434	2	2	1	2
Value added††	1 319 709	1 109 665	1 022 752	568 859	2	2	1	2
Selected costs	1 901 299	1 503 479	1 281 549	766 934	2	2	1	3
Materials, components, and supplies	1 109 630	828 013	852 679	493 188	2	2	1	3
Construction work subcontracted out to others	709 995	619 386	373 532	241 969	3	3	2	3
Selected power, fuels, and lubricants	81 673	56 079	55 337	31 777	4	2	2	2
Electricity.....	13 320	7 633	7 062	3 480	5	3	2	3
Natural gas	6 256	3 127	1 430	1 305	3	3	7	6
Gasoline and diesel fuel	57 334	41 899	41 984	23 701	4	2	2	2
On highway use.....	40 549	30 874	(NA)	(NA)	4	2	(NA)	(NA)
Off highway use.....	16 785	11 024	(NA)	(NA)	6	4	(NA)	(NA)
Other, including lubricating oils and greases.....	4 763	3 419	4 861	3 292	10	3	2	4
Rental cost for machinery, equipment, and buildings	51 778	38 726	39 426	16 445	4	4	1	3
For machinery and equipment	41 169	30 964	34 551	14 457	5	4	2	3
For buildings.....	10 609	7 762	4 875	1 989	6	6	4	5
Selected purchased services	71 350	60 730	57 159	35 110	5	3	1	2
Communication services	17 755	11 247	10 255	6 327	11	4	3	4
Repairs to buildings and other structures	(S)	2 930	2 139	1 316	(S)	11	7	6
Repairs to machinery and equipment	50 076	46 552	44 763	27 468	4	3	1	2
Ownership of construction projects:								
Value of construction work	3 153 995	2 557 272	2 253 837	1 301 403	2	2	1	2
Government owned	1 149 379	799 978	589 868	421 497	3	4	3	2
Federal	374 421	358 555	(NA)	(NA)	5	5	(NA)	(NA)
State and local	774 958	441 423	(NA)	(NA)	4	4	(NA)	(NA)
Privately owned	2 004 617	1 757 293	1 663 968	879 906	4	3	2	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	519 973	475 637	3	3
Capital expenditures, other than land -----	57 114	54 648	5	4
New -----	42 651	40 336	5	5
Used -----	14 463	14 312	11	9
Retirements and disposition of depreciable assets -----	26 616	28 913	9	20
End-of-year gross book value of depreciable assets -----	550 470	501 372	3	3
Depreciation charges during year -----	59 933	55 105	4	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	68 572	94 129	10	8
Capital expenditures, other than land -----	3 367	8 492	23	12
New buildings and other structures -----	2 188	6 231	20	14
Used buildings and other structures -----	* 1 179	2 261	54	20
Retirements and disposition of depreciable assets -----	7 525	2 705	14	29
End-of-year gross book value of depreciable assets -----	64 414	99 915	10	8
Depreciation charges during year -----	5 800	7 871	10	8
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	451 401	381 508	3	3
Capital expenditures, other than land -----	53 746	46 155	5	5
New machinery and equipment, including automobiles and trucks -----	40 463	34 105	5	5
New automobiles and trucks, intended primarily for highway use -----	16 675	17 528	8	5
Used machinery and equipment, including automobiles and trucks -----	13 284	12 050	11	9
Retirements and disposition of depreciable assets -----	19 091	26 207	12	22
End-of-year gross book value of depreciable assets -----	486 057	401 456	3	3
Depreciation charges during year -----	54 133	47 233	4	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	3 938	1
Value of construction work	3 153 995	2
Establishments with inventories:		
Number	1 120	4
Value of construction work	1 197 992	2
Inventories ¹ :		
End of 1992, materials and supplies	37 895	18
End of 1991, materials and supplies	37 919	19
Establishments with no inventories:		
Number	1 456	4
Value of construction work	1 171 814	2
Establishments not reporting:		
Number	1 362	4
Value of construction work	784 189	5

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	3 938	2 413	762	413	255	58	28	7	2	—	
All employees** -----	34 553	4 654	4 787	5 598	7 404	4 071	4 669	3 369	(D)	—	
Payroll, all employees -----	649 627	62 775	78 671	94 038	141 051	85 315	104 163	83 615	(D)	—	
Dollar value of business done -----	3 221 008	484 961	376 648	435 209	730 320	338 864	580 018	274 988	(D)	—	
Value of construction work -----	3 153 995	480 467	368 331	422 442	718 992	331 191	562 299	270 273	(D)	—	
Net value of construction work† -----	2 444 000	380 058	323 758	356 836	515 121	281 184	364 614	222 429	(D)	—	
Value added†† -----	1 319 709	194 021	184 038	199 117	267 440	149 517	179 396	146 181	(D)	—	
Cost of materials, components, supplies, and fuels -----	1 191 304	190 531	148 038	170 485	259 009	139 340	202 937	80 963	(D)	—	
Cost of construction work subcontracted out to others -----	709 995	100 409	44 573	65 607	203 871	50 007	197 685	47 844	(D)	—	
Rental cost for machinery, equipment, and buildings -----	51 778	3 614	3 894	9 807	9 549	7 281	8 168	9 466	(D)	—	
Capital expenditures, other than land -----	57 114	8 239	8 542	6 330	10 926	9 004	11 131	2 942	(D)	—	
End-of-year gross book value of depreciable assets -----	550 470	(S)	80 070	70 473	107 043	80 321	98 606	55 754	(D)	—	
1987											
All employees** -----	32 450	(S)	5 236	5 831	6 768	3 797	2 936	3 626	(D)	—	
Value of construction work -----	2 557 272	(S)	283 391	382 861	603 214	663 652	(D)	263 837	(D)	—	
Value added†† -----	1 109 665	(S)	138 803	167 801	396 406	(D)	111 845	131 684	(D)	—	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	5	8	8	5	(Z)	(Z)	(Z)	(D)	—	
Net value of construction work† -----	2	9	10	8	4	(Z)	(Z)	(Z)	(D)	—	
Capital expenditures, other than land -----	5	26	20	16	5	(Z)	(Z)	(Z)	(D)	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	3 938	(S)	(S)	516	1 011	700	407	362	153	56	42
All employees** -----	34 553	(S)	(S)	1 010	3 154	4 112	3 748	6 030	4 480	3 925	7 269
Payroll, all employees -----	649 627	(S)	(S)	10 597	40 238	59 700	61 440	111 467	98 580	82 492	178 563
Dollar value of business done -----	3 221 008	(S)	(S)	38 482	167 039	251 153	286 843	550 475	531 941	384 140	992 911
Value of construction work -----	3 153 995	(S)	(S)	38 414	164 207	247 322	277 574	539 566	523 971	376 310	968 716
Net value of construction work† -----	2 444 000	(S)	(S)	36 021	146 337	223 833	240 969	442 917	405 226	275 526	656 380
Value added†† -----	1 319 709	(S)	(S)	21 981	84 429	126 389	129 767	235 403	207 706	150 829	352 172
Cost of materials, components, supplies, and fuels -----	1 191 304	(S)	(S)	14 108	64 741	101 276	120 470	218 423	205 489	132 527	328 403
Cost of construction work subcontracted out to others -----	709 995	(S)	(S)	2 393	17 869	23 488	36 605	96 649	118 745	100 783	312 336
Rental cost for machinery, equipment, and buildings -----	51 778	(S)	(S)	600	(S)	2 534	3 298	9 563	9 195	6 502	17 748
Capital expenditures, other than land -----	57 114	(S)	(S)	(S)	3 713	6 596	3 674	11 113	8 096	8 265	14 434
End-of-year gross book value of depreciable assets -----	550 470	(S)	(S)	(S)	26 033	54 731	44 489	96 925	88 553	69 892	159 917
1987											
All employees** -----	32 450	(S)	(S)	(S)	4 131	3 141	4 094	5 739	3 278	2 748	6 914
Value of construction work -----	2 557 272	(S)	(S)	(S)	175 861	183 063	263 667	467 085	346 854	318 252	740 105
Value added†† -----	1 109 665	(S)	(S)	(S)	93 544	92 484	119 766	207 336	152 914	133 565	272 404
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	12	9	9	9	6	3	1	(Z)
Net value of construction work† -----	2	(S)	(S)	10	7	9	9	8	9	2	(Z)
Capital expenditures, other than land -----	5	(S)	(S)	(S)	28	31	20	12	11	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	3 153 995	2 005 685	629 334	434 708	2	3	3	4
Building construction	2 014 920	1 341 688	455 080	218 152	3	4	3	6
Single-family houses	626 060	469 139	103 070	53 851	8	11	8	9
Single-family houses, detached	576 329	429 898	96 450	49 981	9	11	8	10
Single-family houses, attached, including townhouses and townhouse-type condominiums	49 730	39 241	6 620	3 870	18	22	26	27
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	55 438	33 605	17 375	4 458	16	23	24	16
Other residential buildings, including hotels, motels, and tourist cabins	23 632	19 426	2 244	1 963	11	10	21	38
Office buildings	242 883	151 195	(S)	27 420	3	4	(S)	8
Other commercial buildings such as stores, restaurants, and automobile service stations	210 607	122 093	55 925	32 590	6	7	10	17
Industrial buildings and warehouses	378 572	251 465	66 104	61 003	3	3	8	8
Industrial buildings	335 820	219 093	58 975	57 753	4	3	8	9
Warehouses	42 752	32 372	7 129	3 250	9	9	17	12
Religious buildings	42 680	20 561	17 732	4 388	11	14	19	17
Educational buildings	141 229	78 909	48 930	13 391	9	12	11	24
Hospitals and institutional buildings	211 730	129 177	68 465	14 087	4	3	9	6
Amusement, social, and recreational buildings, indoors	28 868	23 870	(S)	942	6	6	(S)	26
Other nonresidential buildings	53 221	42 249	6 914	4 059	7	6	12	37
Nonbuilding construction	1 054 807	663 997	174 254	216 557	2	2	6	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	423 657	257 641	95 893	70 122	4	4	9	4
Private driveways and parking areas	25 846	13 817	*2 048	*9 981	27	18	46	47
Recreational facilities	16 417	14 764	1 028	(S)	6	3	21	(S)
Bridges, tunnels, and elevated highways	120 951	98 077	13 541	9 333	1	(Z)	2	4
Conservation and development construction	48 571	32 818	*6 361	9 392	18	22	41	30
Power and communication transmission lines, towers, and related facilities	106 433	50 260	10 376	45 797	7	9	30	2
Sewers, water mains, and related facilities	115 742	84 030	17 603	14 109	5	7	13	8
Sewers, sewer lines, septic systems, and related facilities	51 268	40 306	6 770	4 192	8	9	10	15
Water mains and related facilities	64 474	43 724	10 833	9 917	7	10	21	9
Blast furnaces, petroleum refineries, chemical complexes, etc.	81 787	47 266	*4 405	30 116	8	5	50	13
Sewage treatment and water treatment plants	21 064	11 115	9 116	*833	11	12	10	56
Other nonbuilding construction	94 338	54 209	13 881	26 248	11	16	11	14
Construction work, n.s.k.	84 269	(NA)	(NA)	(NA)	10	(NA)	(NA)	(NA)
1987								
Value of construction work	2 557 272	1 639 630	475 632	321 784	2	2	3	3
Building construction	1 694 866	1 167 077	374 747	153 042	3	3	4	6
Single-family houses	438 887	323 981	72 932	41 974	8	10	8	10
Single-family houses, detached	376 114	270 222	66 981	38 910	7	10	9	10
Single-family houses, attached, including townhouses and townhouse-type condominiums	62 773	53 758	5 950	3 063	35	40	8	30
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	111 765	90 305	16 403	5 056	7	8	12	19
Other residential buildings, including hotels, motels, and tourist cabins	64 587	42 758	15 764	6 064	9	13	10	24
Office buildings	194 179	141 786	39 076	13 316	5	6	10	7
Other commercial buildings such as stores, restaurants, and automobile service stations	206 423	139 608	44 343	22 471	5	5	9	7
Industrial buildings and warehouses	341 658	221 086	77 509	43 062	5	5	5	12
Industrial buildings	279 217	168 115	70 368	40 733	5	5	6	13
Warehouses	62 441	52 971	7 141	2 328	10	11	12	19
Religious buildings	36 359	21 141	13 349	1 868	8	11	13	12
Educational buildings	72 529	36 769	29 084	6 674	8	10	14	27
Hospitals and institutional buildings	131 957	78 626	48 132	5 198	3	3	4	9
Amusement, social, and recreational buildings, indoors	12 785	10 347	1 881	556	28	35	4	17
Other nonresidential buildings	83 737	60 670	16 274	6 803	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	742 181	472 553	100 885	168 742	2	3	3	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	290 014	166 501	45 566	77 946	2	3	3	3
Private driveways and parking areas	15 189	5 996	1 714	7 477	22	32	35	12
Bridges, tunnels, and elevated highways	96 323	64 973	16 617	14 732	7	6	5	20
Conservation and development construction	16 157	(D)	(D)	*1 155	21	(D)	(D)	52
Power and communication transmission lines, towers, and related facilities	90 605	68 285	9 638	12 680	5	3	9	30
Sewers, water mains, and related facilities	81 598	60 324	7 790	13 483	9	9	21	14
Sewers, sewer lines, septic systems, and related facilities	39 757	27 882	4 635	7 239	10	10	18	21
Water mains and related facilities	41 840	32 441	3 155	6 243	10	10	31	16
Blast furnaces, petroleum refineries, chemical complexes, etc.	30 265	(D)	(D)	20 824	3	(D)	(D)	3
Sewage treatment and water treatment plants	16 010	10 927	4 688	*394	2	3	(Z)	46
Other nonbuilding construction	106 020	74 050	11 930	20 051	14	15	16	15
Construction work, n.s.k.	120 224	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	3 938	27 763	24 925	27 358	29 952	28 816	1	1	2	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	599	1 675	1 598	1 690	1 790	1 619	6	9	9	9	9	9
1522	Other residential buildings -----	37	349	354	383	387	274	37	32	35	30	34	30
1531	Operative builders -----	99	166	134	172	189	170	19	29	25	26	28	29
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	125	1 643	1 410	1 650	1 811	1 701	17	9	9	9	10	10
1542	Nonresidential buildings, n.e.c. ----	253	2 994	2 719	2 923	3 281	3 052	11	4	4	5	4	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	137	3 102	2 556	3 292	3 397	3 162	13	4	4	4	4	4
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	12	855	708	868	930	915	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	98	1 869	1 288	1 462	2 145	2 581	13	4	6	5	3	4
1629	Heavy construction, n.e.c. -----	148	1 911	1 345	1 628	2 340	2 332	13	7	7	7	8	6
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	590	3 411	3 282	3 450	3 587	3 327	3	3	3	3	3	3
1721	Painting and paper hanging -----	211	811	786	818	858	784	8	10	11	10	10	10
1731	Electrical work -----	341	2 038	2 034	1 930	2 085	2 105	6	5	5	5	5	5
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	147	560	605	623	549	463	6	11	14	11	12	13
1742	Plastering, drywall, and insulation work -----	101	970	974	937	969	1 000	15	15	16	16	13	14
1743	Terrazzo, tile, marble, and mosaic work -----	21	83	(S)	91	77	(S)	17	21	(S)	19	23	(S)
175	Carpentry and floor work:												
1751	Carpentry -----	175	563	490	568	593	601	9	15	15	14	16	18
1752	Floor laying and other floor work --	52	131	146	139	124	116	9	6	5	3	6	3
1761	Roofing, siding, and sheet metal work -----	239	1 554	1 554	1 489	1 631	1 541	8	11	12	9	11	13
1771	Concrete work -----	136	933	856	897	1 057	924	13	15	14	12	19	19
1781	Water well drilling -----	33	284	273	288	287	288	23	20	15	18	18	25
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	28	282	234	372	254	270	7	15	15	27	19	17
1793	Glass and glazing work -----	27	89	86	91	89	91	3	15	13	15	14	16
1794	Excavation work -----	103	333	316	362	349	304	20	21	25	22	20	19
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	26	369	344	352	396	382	21	12	9	9	13	13
1799	Special trade contractors, n.e.c. ----	200	786	747	884	778	738	12	13	18	13	12	14

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.8	18.8	113.6	.206	.378	.225	.232	.016
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.5	14.8	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings -----	11.3	13.0	83.7	.185	.263	.309	*.011	.006
1531	Operative builders -----	4.6	24.1	1 025.5	.064	.372	.244	(S)	(S)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	16.3	16.9	122.5	.171	.278	.344	.086	.011
1542	Nonresidential buildings, n.e.c. -----	15.7	19.3	190.6	.134	.293	.485	.049	.007
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	27.4	21.0	136.3	.187	.479	.211	.305	.032
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	81.5	21.9	139.5	.179	(D)	.308	.142	.025
1623	Water, sewer, and utility lines -----	21.9	22.5	91.8	.282	.336	.119	.100	.033
1629	Heavy construction, n.e.c. -----	16.1	20.2	89.2	.281	.371	.101	.120	.036
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	7.5	21.4	109.0	.255	.459	.109	.517	.014
1721	Painting and paper hanging -----	4.4	14.7	45.1	.372	(D)	.041	.573	.034
1731	Electrical work -----	7.6	19.5	79.4	.312	.366	.044	.393	.015
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	4.1	11.2	(D)	(D)	(D)	(D)	(D)	(D)
1742	Plastering, drywall, and insulation work -----	11.4	17.6	62.6	.332	.365	.075	.918	.012
1743	Terrazzo, tile, marble, and mosaic work -----	4.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:								
1751	Carpentry -----	3.9	15.5	75.9	.245	.462	.119	.552	(S)
1752	Floor laying and other floor work -----	3.2	13.1	61.9	.266	(D)	.036	.369	.006
1761	Roofing, siding, and sheet metal work -----	7.5	14.6	69.3	.244	.422	(D)	.410	.010
1771	Concrete work -----	8.2	16.3	71.3	.272	.414	.075	.321	.018
1781	Water well drilling -----	11.2	19.0	108.4	.230	.450	.053	.035	.005
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	11.7	16.7	78.7	.250	.366	.117	.652	.022
1793	Glass and glazing work -----	5.8	13.9	95.4	.256	.633	(S)	.417	(S)
1794	Excavation work -----	3.9	19.5	77.2	.305	.337	.077	.641	.044
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	17.3	24.1	69.2	.418	(D)	.015	.196	.015
1799	Special trade contractors, n.e.c. -----	5.2	(D)	68.4	(D)	.398	.052	.213	(D)

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	MEMPHIS, TN-AR-MS MSA											
15,16,17	Construction industries	1 747	19 165	443 617	2 079 965	1 568 485	853 852	740 772	511 480	32 711	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	206	1 023	19 260	181 144	113 776	34 378	(S)	67 368	(S)	12	13
1522	Other residential buildings	30	291	6 235	44 648	26 674	15 870	10 904	17 974	704	9	12
1531	Operative builders	97	385	12 641	206 736	133 727	52 329	82 269	73 009	299	12	19
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	24	701	19 046	111 784	67 691	38 064	30 000	44 093	2 514	8	3
1542	Nonresidential buildings, n.e.c.	115	1 715	41 957	308 873	123 688	60 477	64 541	185 185	1 793	6	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	849	21 705	104 939	84 472	42 584	43 254	20 467	3 918	1	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	5	124	3 010	14 101	(D)	4 580	5 623	(D)	(D)	25	(D)
1623	Water, sewer, and utility lines	24	811	16 646	69 103	61 807	40 509	21 487	7 296	1 621	2	1
1629	Heavy construction, n.e.c.	30	713	20 650	103 084	87 938	57 587	30 358	15 146	7 696	4	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	288	3 404	76 522	263 034	242 959	130 716	115 118	20 075	3 656	3	3
1721	Painting and paper hanging	93	724	13 226	33 597	30 469	20 744	9 739	3 127	335	8	5
1731	Electrical work	151	2 482	66 922	204 828	198 080	119 421	86 014	6 748	1 906	4	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	684	13 941	39 318	36 399	18 952	17 524	(S)	464	9	7
1742	Plastering, drywall, and insulation work	(S)	806	18 178	56 789	52 582	33 450	21 508	4 207	328	7	7
1743	Terrazzo, tile, marble, and mosaic work	30	186	3 641	10 544	9 947	5 676	5 172	(S)	(S)	19	23
175	Carpentry and floor work:											
1751	Carpentry	83	310	4 842	18 343	17 224	9 523	7 711	(S)	*80	20	20
1752	Floor laying and other floor work	(S)	166	2 791	10 938	10 005	5 063	5 210	933	(S)	7	9
1761	Roofing, siding, and sheet metal work	96	1 239	25 258	84 988	74 191	47 645	29 704	10 797	816	8	10
1771	Concrete work	95	893	16 788	78 061	65 825	39 678	26 291	12 236	1 822	8	5
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	109	2 744	4 417	4 348	3 139	(D)	*69	(D)	10	23
1793	Glass and glazing work	18	144	3 225	7 771	7 706	4 460	4 883	65	145	14	15
1794	Excavation work	20	182	3 469	12 325	11 755	8 802	3 334	570	1 417	23	18
1795	Wrecking and demolition work	5	(D)	(D)	(D)	(D)	(D)	(D)	128	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	18	495	18 004	64 643	(D)	32 072	23 485	(D)	2 019	(Z)	(D)
1799	Special trade contractors, n.e.c.	112	653	11 340	40 290	36 854	25 146	12 594	3 436	(S)	15	17

Contents

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Tennessee. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 44,135 establishments in this State operating in the construction industries. These establishments accounted for \$10.7 billion in total dollar value of business done.

Most of the 44,135 construction establishments were small. Of the total, 34,865 were nonemployers, and over half of the employer establishments had less than 5 employees. The 3,941 construction establishments with 5 employees or more, while representing only 9 percent of all establishments, accounted for more than 80 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$9.6 billion in total dollar value of business done. Of this amount, \$9.5 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$2.8 billion, leaving net value of construction work of \$6.7 billion. In addition, these establishments paid out \$3.5 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$3.6 billion. (See Introduction and appendixes for explanation of terms.)

There were 9,270 establishments with total employment averaging 89,768 during the year. Total payroll for 1992 was \$2.0 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 34,865 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$1.1 billion. Most of these establishments, about 83 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992
1987

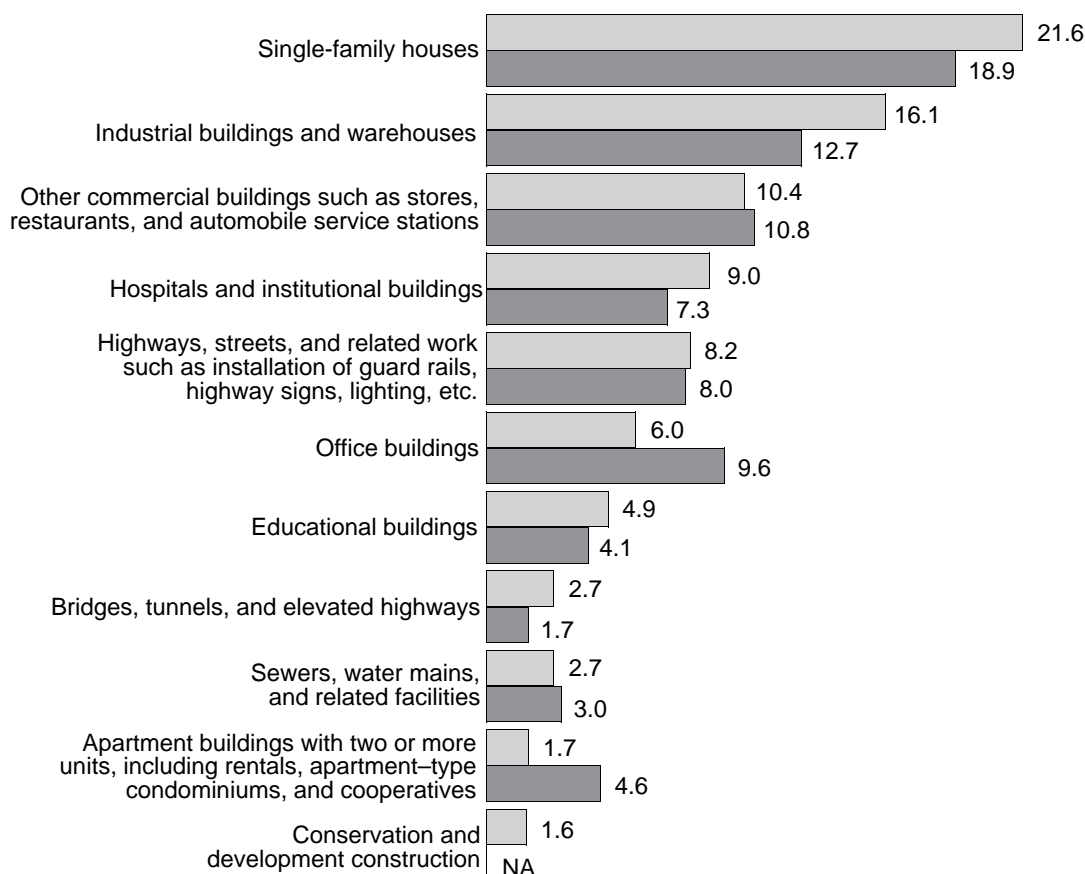


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992
1987

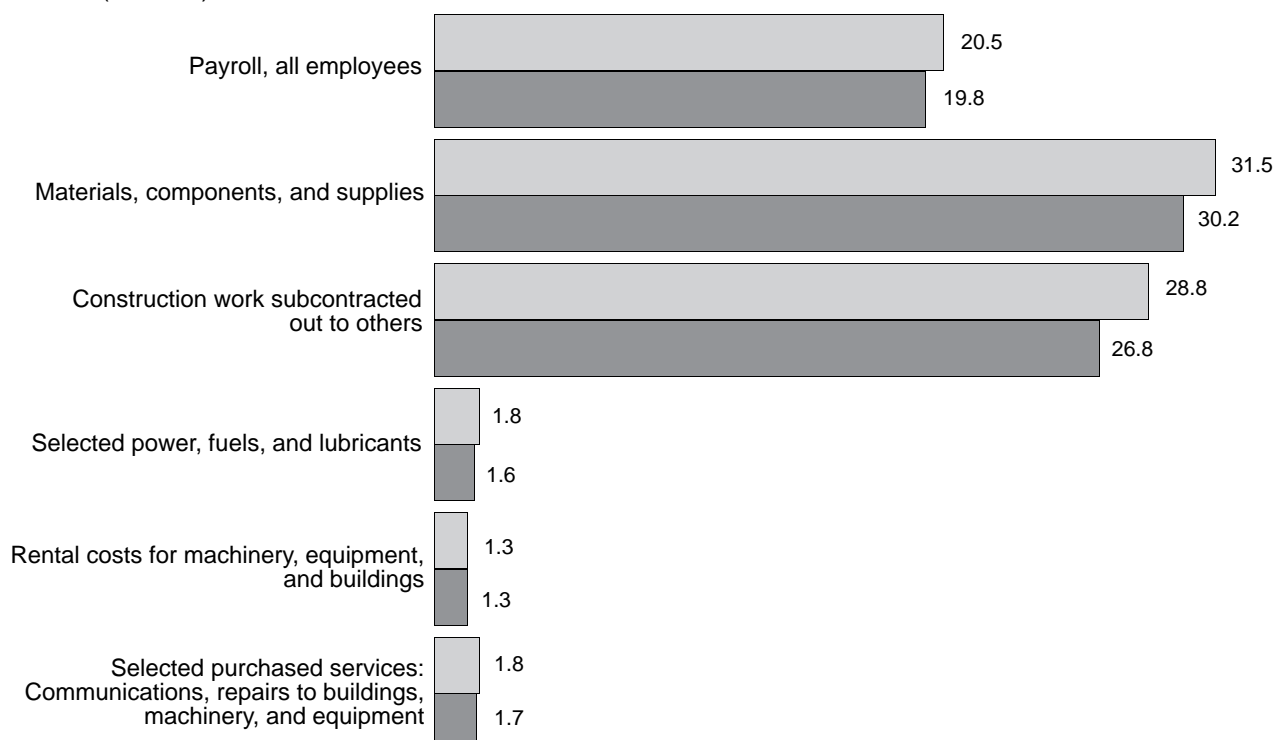


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	44 135	40 479	89 768	10 675 965	34 865	34 970	1 081 683	9 270	5 509	89 768	9 594 282	1	1
15	Building construction—General contractors and operative builders ----	7 852	6 505	23 002	4 596 906	5 132	5 051	495 045	2 720	1 454	23 002	4 101 861	2	2
16	Heavy construction other than building construction—contractors -----	1 307	967	15 703	1 939 286	631	635	19 337	676	332	15 703	1 919 949	1	1
17	Special trade contractors -----	34 976	33 007	51 063	4 139 773	29 102	29 284	567 301	5 874	3 723	51 063	3 572 472	1	1
1711	Plumbing, heating, and air-conditioning --	3 876	3 281	13 599	1 168 661	2 558	2 578	70 274	1 318	703	13 599	1 098 387	2	2
1731	Electrical work -----	2 794	2 376	9 669	744 115	2 015	2 013	36 096	779	363	9 669	708 019	2	2
	1987													
15, 16, 17	Construction industries² -----	43 724	37 854	99 216	11 264 856	34 827	34 953	1 887 050	8 897	2 901	99 216	9 377 806	1	1
15	Building construction—General contractors and operative builders ----	9 413	7 310	28 356	5 114 580	6 754	6 482	730 041	2 659	828	28 356	4 384 539	2	2
16	Heavy construction other than building construction—contractors -----	1 208	764	15 576	1 636 426	509	528	40 652	699	236	15 576	1 595 774	2	2
17	Special trade contractors -----	32 043	28 661	54 798	4 082 610	26 640	26 857	790 632	5 403	1 804	54 798	3 291 978	1	1
1711	Plumbing, heating, and air-conditioning --	3 612	2 815	12 417	1 015 759	2 412	2 440	114 771	1 200	375	12 417	900 988	2	2
1731	Electrical work -----	2 452	1 880	11 012	708 466	1 725	1 732	44 726	727	148	11 012	663 740	2	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	9 270	89 768	70 234	1 965 588	1 370 722	9 470 394	6 704 111	3 632 375
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	1 489	5 463	3 986	88 456	55 912	732 888	515 020	209 610
1522	Other residential buildings -----	80	848	641	15 528	9 541	121 928	66 958	31 567
1531	Operative builders -----	408	1 648	799	40 242	13 461	520 651	333 192	148 184
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	203	4 727	3 746	112 321	78 650	606 296	325 130	168 579
1542	Nonresidential buildings, n.e.c. -----	540	10 315	7 374	246 915	148 548	2 076 727	748 343	379 294
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	191	5 965	5 042	145 517	108 095	795 924	620 940	315 579
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	30	1 433	1 262	35 770	27 549	204 114	136 954	64 753
1623	Water, sewer, and utility lines -----	191	3 273	2 780	68 830	53 208	296 554	258 409	147 021
1629	Heavy construction, n.e.c. -----	264	5 033	4 079	162 803	128 891	595 990	451 895	275 928
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	1 318	13 599	10 521	302 404	209 191	1 089 836	996 794	532 988
1721	Painting and paper hanging -----	405	2 598	2 166	46 639	34 363	124 509	117 014	82 707
1731	Electrical work -----	779	9 669	7 543	236 231	165 389	695 778	672 550	398 939
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	468	3 219	2 899	51 590	42 496	130 477	(D)	79 465
1742	Plastering, drywall, and insulation work -----	285	3 743	3 040	70 937	51 239	247 437	228 024	128 658
1743	Terrazzo, tile, marble, and mosaic work -----	92	541	401	8 875	5 996	28 711	27 745	15 040
175	Carpentry and floor work:								
1751	Carpentry -----	485	1 932	1 597	30 776	23 238	128 137	109 740	65 061
1752	Floor laying and other floor work -----	146	681	520	12 006	7 964	68 053	60 364	30 877
1761	Roofing, siding, and sheet metal work -----	549	4 357	3 383	83 358	57 248	300 934	275 409	147 888
1771	Concrete work -----	386	2 758	2 240	47 607	33 155	189 476	168 313	99 502
1781	Water well drilling -----	46	264	204	4 722	3 316	20 704	20 339	12 124
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	45	967	811	22 573	18 157	57 785	53 683	36 191
1793	Glass and glazing work -----	65	467	317	9 830	5 593	30 611	30 329	13 948
1794	Excavation work -----	247	1 195	1 006	19 608	15 757	75 936	70 636	50 155
1795	Wrecking and demolition work -----	12	98	80	1 436	1 147	5 371	(D)	3 331
1796	Installing building equipment, n.e.c. -----	98	2 129	1 664	49 250	37 646	153 501	136 659	93 342
1799	Special trade contractors, n.e.c. -----	449	2 847	2 133	51 364	34 974	172 064	151 801	101 643

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
3 195 624	2 766 283	2 293 286	125 265	169 126	1 469 507	99 216	9 058 512	3 743 920	1	1	3	15, 16, 17
												15
311 580	217 868	14 611	3 870	8 761	54 282	5 967	513 227	196 234	5	6	32	152
35 552	54 970	*3 352	905	827	6 930	1 954	400 517	95 792	20	12	39	1521
199 009	187 459	(S)	1 381	2 789	28 217	3 017	606 496	139 481	9	10	26	1531
162 794	281 166	23 620	6 499	4 244	49 633	3 864	438 788	168 375	4	3	11	154
385 844	1 328 385	44 224	15 699	14 299	118 696	13 554	2 253 954	584 658	2	2	16	1542
												16
325 920	174 984	154 802	17 592	35 425	332 390	6 674	748 872	316 690	2	1	5	1611
73 366	67 160	28 049	2 408	4 702	45 864	1 230	114 007	53 398	4	4	6	162
111 649	38 145	24 644	5 125	9 868	101 638	4 424	372 000	203 684	4	5	14	1622
181 349	144 095	86 648	22 535	34 335	213 401	3 248	321 124	156 523	2	2	2	1623
												17
472 357	93 042	633 310	15 199	13 304	123 259	12 417	892 336	423 643	2	2	9	1711
34 587	7 495	81 106	2 049	3 563	18 221	2 598	102 111	68 061	5	5	23	1721
285 852	23 228	370 933	7 495	10 016	83 117	11 012	648 989	398 487	2	2	10	1731
44 313	(D)	98 009	1 722	(S)	17 799	4 794	151 393	95 205	5	(D)	(S)	174
105 448	19 413	189 091	2 502	2 137	19 162	4 950	293 342	157 789	6	5	18	1742
14 279	(S)	26 248	*487	287	3 151	743	35 730	20 423	9	10	20	1743
45 228	18 397	(S)	1 373	1 422	12 011	2 410	118 990	72 316	10	8	22	175
30 624	7 689	45 787	*1 538	607	6 586	656	40 195	16 612	13	15	39	1751
131 090	25 525	126 288	3 212	4 692	50 192	4 239	248 581	126 651	4	5	20	1761
68 982	21 164	87 563	2 938	4 628	46 653	2 285	138 877	70 049	8	6	27	1771
8 466	365	1 354	250	580	9 986	192	13 241	6 673	9	8	3	1781
19 506	4 102	39 356	1 352	784	12 427	1 461	75 157	55 114	4	3	9	179
18 730	283	21 035	621	298	2 846	609	45 535	24 827	7	6	25	1791
22 009	5 300	43 038	2 875	(S)	56 139	1 586	113 899	80 157	10	11	(S)	1793
1 072	(D)	953	242	110	1 577	165	*8 632	*8 632	(Z)	(D)	(Z)	1794
49 270	16 842	27 645	2 897	3 074	29 435	1 705	141 128	87 412	3	3	5	1795
56 749	20 264	51 464	2 498	2 054	25 896	2 976	150 623	84 831	8	9	23	1796

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	9 270	8 897	7 558	9 352	1	1	2	3
Proprietors and working partners.....	5 509	2 901	3 263	6 839	2	4	3	4
All employees**	89 768	99 216	73 506	85 239	1	1	1	1
Construction workers:								
March.....	64 834	76 100	57 969	64 673	1	1	1	1
May	70 201	81 725	61 307	76 632	1	1	1	1
August	73 299	85 656	63 339	80 300	1	1	1	1
November.....	72 600	79 179	59 892	73 783	1	1	1	1
Average.....	70 234	80 665	61 360	74 002	1	1	1	1
Other employees:								
March.....	19 651	18 332	12 028	10 569	1	1	1	2
May	19 402	18 474	(NA)	(NA)	1	1	(NA)	(NA)
August	19 433	18 652	(NA)	(NA)	1	1	(NA)	(NA)
November.....	19 650	18 743	(NA)	(NA)	1	1	(NA)	(NA)
Average.....	19 534	18 550	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	1 965 588	1 860 226	1 098 325	839 143	1	1	1	1
Payroll, construction workers	1 370 722	1 340 801	836 990	667 116	1	1	1	1
Payroll, other employees	594 866	519 425	261 335	172 028	1	1	1	1
First-quarter payroll, all employees	427 212	415 502	250 697	168 293	1	1	1	1
Fringe benefits, all employees	372 040	328 407	187 493	129 575	1	1	1	1
Legally required expenditures.....	270 630	247 339	141 148	90 427	1	1	1	1
Voluntary expenditures.....	101 410	81 068	46 344	39 149	1	1	1	1
Dollar value of business done	9 594 282	9 377 806	5 272 053	3 707 520	1	1	1	1
Value of construction work	9 470 394	9 058 512	5 110 219	3 548 969	1	1	1	1
Value of construction work subcontracted in from others	2 293 286	1 881 170	1 131 831	842 790	2	2	2	1
Other business receipts	123 888	181 320	135 252	158 551	6	4	2	6
Net value of construction†	6 704 111	6 548 024	3 713 067	2 717 044	1	1	1	1
Value added††	3 632 375	3 743 920	2 113 330	1 466 511	1	1	1	1
Selected costs	5 961 907	5 495 912	3 132 141	2 173 539	1	1	1	1
Materials, components, and supplies	3 024 317	2 836 645	1 629 017	1 270 857	1	1	1	1
Construction work subcontracted out to others	2 766 283	2 510 488	1 397 152	831 925	1	1	1	1
Selected power, fuels, and lubricants	171 307	148 778	105 971	70 757	1	1	2	1
Electricity.....	30 335	21 789	14 094	8 261	3	2	2	2
Natural gas	8 988	5 727	4 970	3 380	3	3	2	4
Gasoline and diesel fuel	120 050	108 864	79 140	51 194	1	1	2	1
On highway use.....	80 787	74 516	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use.....	39 263	34 348	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases.....	11 935	12 396	7 765	7 922	4	2	2	3
Rental cost for machinery, equipment, and buildings	125 265	122 664	63 251	45 192	3	2	1	1
For machinery and equipment	88 400	89 182	50 474	38 538	3	3	2	2
For buildings.....	36 865	33 481	12 776	6 654	4	3	2	2
Selected purchased services	176 483	158 615	95 787	80 754	2	2	1	3
Communication services	49 143	35 584	21 320	16 416	4	2	2	6
Repairs to buildings and other structures	7 690	7 687	3 513	2 838	5	5	4	5
Repairs to machinery and equipment	119 650	115 343	70 953	61 499	2	2	1	2
Ownership of construction projects:								
Value of construction work	9 470 394	9 058 512	5 110 219	3 548 969	1	1	1	1
Government owned	2 679 008	2 123 651	1 351 559	865 415	2	2	2	1
Federal	778 574	544 358	(NA)	(NA)	5	3	(NA)	(NA)
State and local	1 900 434	1 579 292	(NA)	(NA)	2	2	(NA)	(NA)
Privately owned	6 791 386	6 934 861	3 758 660	2 683 555	2	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 380 837	1 079 566	2	2
Capital expenditures, other than land -----	169 126	167 937	3	3
New -----	127 838	132 102	4	4
Used -----	41 288	35 834	4	5
Retirements and disposition of depreciable assets -----	80 457	70 022	7	8
End-of-year gross book value of depreciable assets -----	1 469 507	1 177 482	2	2
Depreciation charges during year -----	151 341	140 514	3	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	162 428	190 712	6	6
Capital expenditures, other than land -----	17 120	24 911	13	11
New buildings and other structures -----	13 786	19 396	16	14
Used buildings and other structures -----	3 334	5 514	15	13
Retirements and disposition of depreciable assets -----	12 199	7 305	36	28
End-of-year gross book value of depreciable assets -----	167 348	208 318	5	6
Depreciation charges during year -----	12 732	17 130	6	6
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 218 409	888 853	2	2
Capital expenditures, other than land -----	152 007	143 026	3	3
New machinery and equipment, including automobiles and trucks -----	114 052	112 706	3	4
New automobiles and trucks, intended primarily for highway use -----	40 682	47 546	6	4
Used machinery and equipment, including automobiles and trucks -----	37 954	30 320	4	5
Retirements and disposition of depreciable assets -----	68 258	62 716	5	8
End-of-year gross book value of depreciable assets -----	1 302 158	969 163	2	2
Depreciation charges during year -----	138 609	123 384	3	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	9 270	1
Value of construction work	9 470 394	1
Establishments with inventories:		
Number	2 598	3
Value of construction work	3 517 769	1
Inventories ¹ :		
End of 1992, materials and supplies	109 032	5
End of 1991, materials and supplies	129 748	10
Establishments with no inventories:		
Number	3 244	3
Value of construction work	4 012 690	1
Establishments not reporting:		
Number	3 429	2
Value of construction work	1 939 936	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	9 270	5 330	1 882	1 096	680	188	78	11	6	—	
All employees** -----	89 768	10 334	12 139	14 639	20 582	12 830	11 452	3 574	4 217	—	
Payroll, all employees -----	1 965 588	144 048	213 086	285 035	472 043	335 750	290 506	93 677	131 443	—	
Dollar value of business done -----	9 594 282	1 088 864	1 034 065	1 304 988	2 111 492	1 440 621	1 574 546	549 462	490 244	—	
Value of construction work -----	9 470 394	1 073 835	1 016 984	1 286 028	2 084 810	1 427 805	1 546 306	546 019	488 607	—	
Net value of construction work† -----	6 704 111	819 470	806 856	1 011 336	1 519 809	1 054 517	937 933	325 665	228 525	—	
Value added†† -----	3 632 375	381 766	427 827	548 125	875 073	577 000	483 013	180 209	159 361	—	
Cost of materials, components, supplies, and fuels -----	3 195 624	452 733	396 110	482 171	671 418	490 332	483 160	148 899	70 801	—	
Cost of construction work subcontracted out to others -----	2 766 283	254 365	210 128	274 692	565 001	373 288	608 373	220 354	260 082	—	
Rental cost for machinery, equipment, and buildings -----	125 265	9 331	14 832	16 620	24 219	22 065	20 651	6 046	11 501	—	
Capital expenditures, other than land -----	169 126	13 698	15 804	23 516	35 624	25 260	19 626	35 598	(D)	—	
End-of-year gross book value of depreciable assets -----	1 469 507	115 402	165 676	207 547	333 192	228 928	192 989	225 773	(D)	—	
1987											
All employees** -----	99 216	9 366	13 574	14 866	23 034	15 653	13 146	6 472	3 100	(D)	
Value of construction work -----	9 058 512	783 027	948 134	1 164 005	1 921 145	1 470 439	1 731 602	842 251	197 907	(D)	
Value added†† -----	3 743 920	309 755	417 829	527 633	875 684	619 398	656 208	250 548	86 863	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	4	5	4	2	2	(Z)	(Z)	(Z)	—	
Net value of construction work† -----	1	5	5	4	2	1	(Z)	(Z)	(Z)	—	
Capital expenditures, other than land -----	3	13	18	12	4	(Z)	(Z)	(Z)	(D)	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	9 270	(S)	(S)	1 129	2 325	1 488	1 255	1 036	368	178	141
All employees** -----	89 768	(S)	(S)	2 136	7 241	8 233	11 523	16 823	12 066	10 632	19 572
Payroll, all employees -----	1 965 588	(S)	(S)	21 653	90 084	124 712	208 576	362 462	293 569	282 419	569 619
Dollar value of business done -----	9 594 282	(S)	(S)	83 078	373 235	534 574	877 355	1 555 235	1 288 056	1 233 666	3 612 388
Value of construction work -----	9 470 394	(S)	(S)	82 574	368 882	526 778	865 497	1 525 675	1 265 199	1 219 999	3 579 301
Net value of construction work† -----	6 704 111	(S)	(S)	76 392	329 247	456 281	721 864	1 234 419	992 422	921 342	1 938 443
Value added†† -----	3 632 375	(S)	(S)	47 276	190 709	242 379	392 836	667 232	540 879	515 900	1 013 875
Cost of materials, components, supplies, and fuels -----	3 195 624	(S)	(S)	(S)	142 891	221 699	340 887	596 748	474 400	419 109	957 655
Cost of construction work subcontracted out to others -----	2 766 283	(S)	(S)	6 182	39 635	70 496	143 632	291 255	272 777	298 657	1 640 858
Rental cost for machinery, equipment, and buildings -----	125 265	(S)	(S)	1 313	(S)	7 559	13 803	20 703	15 955	13 358	48 605
Capital expenditures, other than land -----	169 126	(S)	(S)	(S)	6 275	9 277	18 875	24 172	18 449	27 915	61 311
End-of-year gross book value of depreciable assets -----	1 469 507	(S)	(S)	(S)	59 217	89 777	145 656	267 824	219 074	172 857	494 709
1987											
All employees** -----	99 216	(S)	(S)	(S)	(S)	9 422	11 159	18 340	14 925	12 653	19 785
Value of construction work -----	9 058 512	(S)	(S)	(S)	(S)	524 213	732 241	1 531 913	1 275 977	1 206 832	3 335 228
Value added†† -----	3 743 920	(S)	(S)	(S)	(S)	246 821	357 908	722 286	593 017	530 360	1 049 547
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	8	6	6	5	3	2	(Z)	(Z)
Net value of construction work† -----	1	(S)	(S)	7	5	6	5	4	3	2	1
Capital expenditures, other than land -----	3	(S)	(S)	(S)	15	19	16	11	6	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	9 470 394	5 789 577	2 199 532	1 246 690	1	1	2	2
Building construction	7 053 547	4 491 741	1 780 547	781 260	1	2	2	2
Single-family houses	2 045 003	1 498 726	352 408	193 868	3	4	5	5
Single-family houses, detached	1 938 825	1 430 274	330 991	177 560	4	5	6	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	106 178	68 452	21 418	16 308	11	15	20	18
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	164 521	102 880	31 586	(S)	6	5	11	(S)
Other residential buildings, including hotels, motels, and tourist cabins	93 177	57 444	22 940	12 794	8	8	18	24
Office buildings	570 603	298 783	205 967	65 854	2	2	4	5
Other commercial buildings such as stores, restaurants, and automobile service stations	988 105	632 053	247 088	108 964	2	2	5	6
Industrial buildings and warehouses	1 529 058	852 979	399 150	276 929	1	2	2	2
Industrial buildings	1 300 174	692 400	353 600	254 174	1	2	3	2
Warehouses	228 884	160 579	45 550	22 755	3	4	3	3
Religious buildings	135 937	79 712	44 023	12 202	4	5	7	9
Educational buildings	465 824	270 478	172 295	23 051	4	4	6	6
Hospitals and institutional buildings	855 505	571 830	251 331	32 344	1	1	2	3
Amusement, social, and recreational buildings, indoors	65 683	49 778	12 451	3 455	5	6	10	11
Other nonresidential buildings	140 129	77 077	(S)	21 744	5	4	(S)	19
Nonbuilding construction	2 182 252	1 297 836	418 985	465 430	1	2	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	779 167	417 014	196 267	165 886	2	2	2	2
Outdoor swimming pools	29 271	23 357	861	5 052	22	24	39	29
Private driveways and parking areas	82 628	35 700	23 904	23 024	10	11	15	18
Recreational facilities	33 897	30 681	3 015	*201	2	1	16	64
Bridges, tunnels, and elevated highways	259 157	204 794	34 590	19 772	3	3	3	3
Marine construction	48 886	(D)	(D)	15 369	3	(D)	(D)	(Z)
Conservation and development construction	148 897	57 792	13 549	77 556	4	8	18	3
Power and communication transmission lines, towers, and related facilities	135 441	88 490	25 838	21 113	6	9	6	5
Sewers, water mains, and related facilities	256 049	196 372	35 624	24 053	6	8	5	12
Sewers, sewer lines, septic systems, and related facilities	159 165	124 112	21 842	13 211	9	11	8	21
Water mains and related facilities	96 884	72 259	13 782	10 842	3	4	3	5
Pipeline construction other than sewer or water lines	42 656	31 586	7 769	3 301	4	5	5	6
Blast furnaces, petroleum refineries, chemical complexes, etc.	94 586	57 257	7 713	29 616	2	1	(Z)	5
Power plants	111 884	(D)	(D)	63 532	3	(D)	(D)	5
Sewage treatment and water treatment plants	88 830	63 231	20 421	5 178	5	4	9	22
Sewage treatment plants	41 409	25 627	13 852	1 930	3	1	7	35
Water treatment plants	47 421	37 604	6 569	3 249	8	6	14	28
Other nonbuilding construction	70 904	47 738	11 391	11 775	9	9	15	14
Construction work, n.s.k.	234 594	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)
1987								
Value of construction work	9 058 512	6 285 993	1 601 053	793 822	1	1	2	2
Building construction	6 780 220	5 018 496	1 210 269	551 454	1	1	2	3
Single-family houses	1 715 813	1 323 262	244 685	147 865	4	4	7	6
Single-family houses, detached	1 497 040	1 132 303	229 896	134 840	4	5	7	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	218 773	190 958	14 789	13 025	8	8	26	16
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	416 430	364 335	21 183	30 911	3	3	10	17
Other residential buildings, including hotels, motels, and tourist cabins	353 255	289 862	43 198	20 194	3	2	13	8
Office buildings	865 755	631 931	168 111	65 712	2	3	3	4
Other commercial buildings such as stores, restaurants, and automobile service stations	975 967	716 013	183 084	76 869	2	2	6	7
Industrial buildings and warehouses	1 151 881	787 213	214 125	150 543	2	2	3	4
Industrial buildings	874 508	550 030	189 658	134 820	2	2	3	5
Warehouses	277 372	237 182	24 467	15 722	3	3	8	9
Religious buildings	101 608	65 593	27 371	8 643	4	5	8	6
Educational buildings	374 852	270 418	86 686	17 747	2	1	9	2
Hospitals and institutional buildings	658 748	464 026	171 380	23 341	1	1	3	3
Amusement, social, and recreational buildings, indoors	62 026	30 143	29 870	2 012	4	7	4	6
Other nonresidential buildings	103 885	75 700	20 576	7 617	12	14	16	11
Nonbuilding construction	1 900 648	1 267 497	390 783	242 367	1	2	3	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	725 742	429 016	198 657	98 068	2	2	5	2
Private driveways and parking areas	59 045	41 675	9 913	7 456	8	9	6	25
Bridges, tunnels, and elevated highways	149 679	119 379	25 196	5 103	3	4	2	7
Power and communication transmission lines, towers, and related facilities	199 401	89 015	53 831	56 554	1	3	(Z)	1
Sewers, water mains, and related facilities	268 058	224 682	26 373	17 002	7	8	17	10
Sewers, sewer lines, septic systems, and related facilities	170 249	142 307	17 217	10 724	10	11	21	11
Water mains and related facilities	97 809	82 374	9 156	6 278	5	5	24	16
Pipeline construction other than sewer or water lines	25 771	15 719	5 235	4 816	8	8	19	18
Blast furnaces, petroleum refineries, chemical complexes, etc.	16 261	4 356	2 262	9 643	7	19	7	2
Power plants	31 361	12 249	4 691	14 420	7	3	8	13
Sewage treatment and water treatment plants	130 421	103 993	25 311	1 116	1	1	1	6
Sewage treatment plants	103 256	82 701	(D)	(D)	1	1	(D)	(D)
Water treatment plants	27 164	21 292	(D)	(D)	2	3	(D)	(D)
Other nonbuilding construction	294 909	227 413	39 314	28 189	8	9	12	14
Construction work, n.s.k.	377 643	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	9 270	70 234	64 834	70 201	73 299	72 600	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	1 489	3 986	3 705	4 168	4 213	3 857	4	6	6	6	6	6
1522	Other residential buildings -----	80	641	599	635	627	702	23	23	25	25	23	20
1531	Operative builders -----	408	799	790	835	823	749	10	12	12	12	12	11
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	203	3 746	3 675	3 725	3 867	3 718	13	5	4	4	7	5
1542	Nonresidential buildings, n.e.c. ----	540	7 374	7 276	7 275	7 647	7 296	6	2	3	2	2	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	191	5 042	3 708	5 320	5 579	5 560	10	2	2	2	2	2
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	30	1 262	1 103	1 212	1 404	1 327	14	4	4	4	4	4
1623	Water, sewer, and utility lines -----	191	2 780	2 666	2 811	2 939	2 706	10	4	4	4	5	4
1629	Heavy construction, n.e.c. -----	264	4 079	3 285	3 883	3 903	5 243	11	2	3	2	3	2
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 318	10 521	10 047	10 477	10 857	10 702	3	2	2	2	2	2
1721	Painting and paper hanging -----	405	2 166	2 023	2 174	2 370	2 098	3	4	5	5	5	6
1731	Electrical work -----	779	7 543	7 058	7 342	7 591	8 184	3	2	2	2	3	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	468	2 899	2 717	2 861	3 173	2 847	5	5	5	5	5	6
1742	Plastering, drywall, and insulation work -----	285	3 040	2 912	3 058	3 150	3 040	8	6	6	6	6	7
1743	Terrazzo, tile, marble, and mosaic work -----	92	401	405	402	398	400	13	9	10	10	10	10
175	Carpentry and floor work:												
1751	Carpentry -----	485	1 597	1 482	1 750	1 680	1 477	6	10	9	12	11	10
1752	Floor laying and other floor work --	146	520	514	538	541	486	11	16	15	15	17	17
1761	Roofing, siding, and sheet metal work -----	549	3 383	3 277	3 316	3 570	3 367	5	4	4	4	5	4
1771	Concrete work -----	386	2 240	1 887	2 280	2 370	2 423	7	9	9	8	9	9
1781	Water well drilling -----	46	204	201	200	213	201	12	11	12	10	9	10
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	45	811	790	798	819	838	9	3	4	4	3	4
1793	Glass and glazing work -----	65	317	312	295	302	361	7	7	7	8	8	7
1794	Excavation work -----	247	1 006	913	1 071	1 044	997	11	10	10	10	10	10
1795	Wrecking and demolition work -----	12	80	74	73	85	88	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1796	Installing building equipment, n.e.c. -----	98	1 664	1 373	1 421	1 922	1 939	12	3	3	3	3	4
1799	Special trade contractors, n.e.c. ----	449	2 133	2 041	2 282	2 212	1 996	8	9	10	9	9	9

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	9.7	21.9	134.8	.208	.337	.292	.242	.013
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.7	16.2	183.9	.121	.425	.297	.020	.005
1522	Other residential buildings -----	10.7	18.3	190.2	.127	.292	.451	*.027	.007
1531	Operative builders -----	4.0	24.4	651.6	.077	.382	.360	(S)	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	23.2	23.8	161.9	.185	.269	.464	.039	.011
1542	Nonresidential buildings, n.e.c. -----	19.1	23.9	281.6	.119	.186	.640	.021	.008
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	31.2	24.4	157.9	.183	.409	.220	.194	.022
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	48.5	25.0	161.7	.175	.359	.329	.137	.012
1623	Water, sewer, and utility lines -----	17.1	21.0	106.7	.232	.376	.129	.083	.017
1629	Heavy construction, n.e.c. -----	19.0	32.3	146.1	.273	.304	.242	.145	.038
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	10.3	22.2	103.6	.277	.433	.085	.581	.014
1721	Painting and paper hanging -----	6.4	18.0	57.5	.375	.278	.060	.651	.016
1731	Electrical work -----	12.4	24.4	92.2	.340	.411	.033	.533	.011
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6.9	16.0	45.0	.395	.340	(D)	.751	.013
1742	Plastering, drywall, and insulation work -----	13.1	19.0	81.4	.287	.426	.078	.764	.010
1743	Terrazzo, tile, marble, and mosaic work -----	5.9	16.4	71.6	.309	.497	(S)	.914	.017
175	Carpentry and floor work:								
1751	Carpentry -----	4.0	15.9	80.2	.240	.353	.144	(S)	.011
1752	Floor laying and other floor work -----	4.7	17.6	130.9	.176	.450	.113	.673	*.023
1761	Roofing, siding, and sheet metal work -----	7.9	19.1	89.0	.277	.436	.085	.420	.011
1771	Concrete work -----	7.2	17.3	84.6	.251	.364	.112	.462	.016
1781	Water well drilling -----	5.7	17.9	101.5	.228	.409	.018	.065	.012
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	21.6	23.3	71.3	.391	.338	.071	.681	.023
1793	Glass and glazing work -----	7.1	21.1	96.6	.321	.612	.009	.687	.020
1794	Excavation work -----	4.8	16.4	75.5	.258	.290	.070	.567	.038
1795	Wrecking and demolition work -----	8.2	14.7	67.1	.267	.200	(D)	.177	.045
1796	Installing building equipment, n.e.c. -----	21.8	23.1	92.2	.321	.321	.110	.180	.019
1799	Special trade contractors, n.e.c. -----	6.3	18.0	80.7	.299	.330	.118	.299	.015

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	KNOXVILLE, TN MSA											
15,16,17	Construction industries	1 376	15 294	357 428	1 647 147	1 124 913	626 588	516 938	522 234	26 935	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	294	956	15 745	162 995	120 249	58 404	62 641	42 746	880	12	17
1522	Other residential buildings	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	(S)	(S)
1531	Operative builders	46	262	5 906	65 627	46 254	22 765	25 245	19 372	543	16	21
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	53	632	13 551	63 980	36 597	16 317	20 349	27 384	267	23	16
1542	Nonresidential buildings, n.e.c.	69	2 096	48 626	415 131	147 466	81 281	71 618	267 665	1 174	4	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	22	1 008	22 948	118 470	98 455	45 831	53 056	20 015	4 560	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1623	Water, sewer, and utility lines	30	(S)	(S)	(S)	(S)	(S)	15 406	(S)	732	(S)	(S)
1629	Heavy construction, n.e.c.	36	2 305	97 068	288 340	192 299	131 721	62 331	96 040	10 125	2	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	199	1 978	44 816	154 370	145 323	78 914	67 493	9 047	1 869	8	7
1721	Painting and paper hanging	77	553	9 884	28 507	27 665	18 997	8 677	842	1 997	12	17
1731	Electrical work	128	1 420	28 837	86 194	83 802	48 353	36 154	2 392	1 324	4	5
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	397	5 707	14 502	14 005	(S)	4 825	*497	(S)	21	24
1742	Plastering, drywall, and insulation work	37	606	12 756	50 352	45 065	19 162	26 834	*5 287	1 007	9	9
1743	Terrazzo, tile, marble, and mosaic work	8	69	1 218	3 071	3 026	1 984	1 588	45	(D)	(Z)	(Z)
175	Carpentry and floor work:											
1751	Carpentry	68	282	4 180	(S)	(S)	(S)	(S)	(S)	(S)	12	(S)
1752	Floor laying and other floor work	16	146	2 576	9 946	9 477	5 648	4 405	468	128	25	27
1761	Roofing, siding, and sheet metal work	56	389	7 049	29 895	26 399	12 912	13 497	*3 495	151	9	13
1771	Concrete work	41	*221	*3 143	*11 554	*10 778	*7 938	*2 839	*776	*103	41	41
1781	Water well drilling	7	26	*474	(D)	(D)	*1 163	(D)	—	(D)	39	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	6	142	2 851	(D)	(D)	3 619	2 654	(D)	126	(Z)	(D)
1793	Glass and glazing work	12	48	961	3 570	(D)	1 874	1 670	(D)	32	9	(D)
1794	Excavation work	32	198	3 278	9 658	8 674	6 329	3 300	984	(S)	19	21
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	7	277	4 657	13 139	(D)	8 299	5 724	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c.	47	338	5 554	16 130	14 689	9 979	6 383	1 441	(D)	29	28
	MEMPHIS, TN-AR-MS MSA											
15,16,17	Construction industries	1 747	19 165	443 617	2 079 965	1 568 485	853 852	740 772	511 480	32 711	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	206	1 023	19 260	181 144	113 776	34 378	(S)	67 368	(S)	12	13
1522	Other residential buildings	30	291	6 235	44 648	26 674	15 870	10 904	17 974	704	9	12
1531	Operative builders	97	385	12 641	206 736	133 727	52 329	82 269	73 009	299	12	19
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	24	701	19 046	111 784	67 691	38 064	30 000	44 093	2 514	8	3
1542	Nonresidential buildings, n.e.c.	115	1 715	41 957	308 873	123 688	60 477	64 541	185 185	1 793	6	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	849	21 705	104 939	84 472	42 584	43 254	20 467	3 918	1	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	5	124	3 010	14 101	(D)	4 580	5 623	(D)	(D)	25	(D)
1623	Water, sewer, and utility lines	24	811	16 646	69 103	61 807	40 509	21 487	7 296	1 621	2	1
1629	Heavy construction, n.e.c.	30	713	20 650	103 084	87 938	57 587	30 358	15 146	7 696	4	4

TN-14 TENNESSEE

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	MEMPHIS, TN-AR-MS MSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	288	3 404	76 522	263 034	242 959	130 716	115 118	20 075	3 656	3	3
1721	Painting and paper hanging	93	724	13 226	33 597	30 469	20 744	9 739	3 127	335	8	5
1731	Electrical work	151	2 482	66 922	204 828	198 080	119 421	86 014	6 748	1 906	4	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	684	13 941	39 318	36 399	18 952	17 524	(S)	464	9	7
1742	Plastering, drywall, and insulation work	(S)	806	18 178	56 789	52 582	33 450	21 508	4 207	328	7	7
1743	Terrazzo, tile, marble, and mosaic work	30	186	3 641	10 544	9 947	5 676	5 172	(S)	(S)	19	23
175	Carpentry and floor work:											
1751	Carpentry	83	310	4 842	18 343	17 224	9 523	7 711	(S)	*80	20	20
1752	Floor laying and other floor work	(S)	166	2 791	10 938	10 005	5 063	5 210	933	(S)	7	9
1761	Roofing, siding, and sheet metal work	96	1 239	25 258	84 988	74 191	47 645	29 704	10 797	816	8	10
1771	Concrete work	95	893	16 788	78 061	65 825	39 678	26 291	12 236	1 822	8	5
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	109	2 744	4 417	4 348	3 139	(D)	*69	(D)	10	23
1793	Glass and glazing work	18	144	3 225	7 771	7 706	4 460	4 883	65	145	14	15
1794	Excavation work	20	182	3 469	12 325	11 755	8 802	3 334	570	1 417	23	18
1795	Wrecking and demolition work	5	(D)	(D)	(D)	(D)	(D)	(D)	128	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	18	495	18 004	64 643	(D)	32 072	23 485	(D)	2 019	(Z)	(D)
1799	Special trade contractors, n.e.c.	112	653	11 340	40 290	36 854	25 146	12 594	3 436	(S)	15	17
	NASHVILLE, TN MSA											
15,16, 17	Construction industries	2 174	23 815	537 973	2 745 648	1 840 833	1 003 751	872 133	904 815	48 698	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	313	1 279	23 030	157 412	114 113	45 012	70 159	43 299	2 442	13	14
1522	Other residential buildings	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	—	(S)	(D)
1531	Operative builders	106	505	13 228	164 304	103 993	52 067	54 869	60 311	808	10	10
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	34	(S)	(S)	128 873	65 463	(S)	23 419	63 409	(S)	(S)	5
1542	Nonresidential buildings, n.e.c.	145	3 365	82 424	790 050	240 012	123 388	122 760	550 038	8 808	4	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	58	1 804	47 745	300 747	220 177	114 888	119 587	80 571	14 836	4	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	9	410	10 610	62 412	48 112	19 481	28 705	14 300	(D)	9	7
1623	Water, sewer, and utility lines	59	1 154	24 835	110 985	102 128	52 721	49 454	8 857	5 115	9	12
1629	Heavy construction, n.e.c.	(S)	587	14 935	50 239	46 147	22 928	24 129	4 092	2 522	7	8
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	347	3 502	81 160	293 071	262 904	143 843	121 333	30 168	3 046	3	3
1721	Painting and paper hanging	109	709	15 168	38 034	36 124	26 355	9 783	(S)	623	5	4
1731	Electrical work	199	2 960	75 721	211 583	204 822	123 814	83 836	6 761	2 899	4	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	73	918	15 518	37 577	37 093	25 628	11 464	485	(S)	7	6
1742	Plastering, drywall, and insulation work	67	1 117	20 687	70 906	69 192	39 404	30 291	1 714	181	10	9
1743	Terrazzo, tile, marble, and mosaic work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
175	Carpentry and floor work:											
1751	Carpentry	(S)	(S)	(S)	(S)	(S)	17 033	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floor work	29	144	3 382	23 802	20 225	8 337	11 912	*3 577	*96	24	30
1761	Roofing, siding, and sheet metal work	(S)	990	19 343	72 311	65 965	32 087	33 889	6 346	813	8	9
1771	Concrete work	104	851	15 480	51 818	47 269	26 124	21 262	4 549	2 133	16	13

CONSTRUCTION—GEOGRAPHIC AREA SERIES

TENNESSEE TN-15

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NASHVILLE, TN MSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1781	Water well drilling -----	5	20	305	(D)	(D)	799	(D)	—	(D)	(Z)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	16	254	6 560	13 849	13 561	11 601	3 299	289	*125	6	2
1793	Glass and glazing work -----	20	128	2 668	8 877	8 847	3 636	5 560	30	*78	12	13
1794	Excavation work -----	54	245	4 112	16 375	15 619	10 501	5 148	756	*527	25	28
1795	Wrecking and demolition work -----	3	45	723	(D)	(D)	1 912	(D)	(D)	(D)	(Z)	(D)
1796	Installing building equipment, n.e.c. -	24	547	11 411	32 626	28 026	22 535	6 237	*4 601	261	11	13
1799	Special trade contractors, n.e.c. ----	110	885	16 991	66 091	52 548	31 801	21 583	13 543	1 257	17	19

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Appendix D.

Metropolitan Areas

[Titles and definitions shown for MSA's, CMSA's, and PMSA's are those established by the Office of Management and Budget as of June 30, 1993]

Abilene, TX MSA

Taylor County, TX

Akron, OH PMSA—see Cleveland–Akron, OH CMSA

Albany, GA MSA

Dougherty County, GA
Lee County, GA

Albany–Schenectady–Troy, NY MSA

Albany County, NY
Montgomery County, NY
Rensselaer County, NY
Saratoga County, NY
Schenectady County, NY
Schoharie County, NY

Albuquerque, NM MSA

Bernalillo County, NM
Sandoval County, NM
Valencia County, NM

Alexandria, LA MSA

Rapides Parish, LA

Allentown–Bethlehem–Easton, PA MSA

Carbon County, PA
Lehigh County, PA
Northampton County, PA

Altoona, PA MSA

Blair County, PA

Amarillo, TX MSA

Potter County, TX
Randall County, TX

Anchorage, AK MSA

Anchorage Borough, AK

Ann Arbor, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Anniston, AL MSA

Calhoun County, AL

Appleton–Oshkosh–Neenah, WI MSA

Calumet County, WI
Outagamie County, WI
Winnebago County, WI

Asheville, NC MSA

Buncombe County, NC
Madison County, NC

Athens, GA MSA

Clarke County, GA
Madison County, GA
Oconee County, GA

Atlanta, GA MSA

Barrow County, GA
Bartow County, GA

Atlanta, GA MSA—Con.

Carroll County, GA
Cherokee County, GA
Clayton County, GA
Cobb County, GA
Coweta County, GA
DeKalb County, GA
Douglas County, GA
Fayette County, GA
Forsyth County, GA
Fulton County, GA
Gwinnett County, GA
Henry County, GA
Newton County, GA
Paulding County, GA
Pickens County, GA
Rockdale County, GA
Spalding County, GA
Walton County, GA

Atlantic–Cape May, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Augusta–Aiken, GA–SC MSA

Columbia County, GA
McDuffie County, GA
Richmond County, GA
Aiken County, SC
Edgefield County, SC

Austin–San Marcos, TX MSA

Bastrop County, TX
Caldwell County, TX
Hays County, TX
Travis County, TX
Williamson County, TX

Bakersfield, CA MSA

Kern County, CA

Baltimore, MD PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA

Bangor, ME MSA

Penobscot County, ME (part)
Bangor city, ME
Brewer city, ME
Eddington town, ME
Glenburn town, ME
Hampden town, ME
Hermon town, ME
Holden town, ME
Kenduskeag town, ME
Milford town, ME
Old Town city, ME
Orono town, ME
Orrington town, ME
Penobscot Indian Island Reservation, ME
Veazie town, ME

Bangor, ME MSA—Con.

Waldo County, ME (part)
Winterport town, ME

Barnstable–Yarmouth, MA MSA

Barnstable County, MA (part)
Barnstable city, MA
Brewster town, MA
Chatham town, MA
Dennis town, MA
Eastham town, MA
Harwich town, MA
Mashpee town, MA
Orleans town, MA
Sandwich town, MA
Yarmouth town, MA

Baton Rouge, LA MSA

Ascension Parish, LA
East Baton Rouge Parish, LA
Livingston Parish, LA
West Baton Rouge Parish, LA

Beaumont–Port Arthur, TX MSA

Hardin County, TX
Jefferson County, TX
Orange County, TX

Bellingham, WA MSA

Whatcom County, WA

Benton Harbor, MI MSA

Berrien County, MI

Bergen–Passaic, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Billings, MT MSA

Yellowstone County, MT

Biloxi–Gulfport–Pascagoula, MS MSA

Hancock County, MS
Harrison County, MS
Jackson County, MS

Binghamton, NY MSA

Broome County, NY
Tioga County, NY

Birmingham, AL MSA

Blount County, AL
Jefferson County, AL
St. Clair County, AL
Shelby County, AL

Bismarck, ND MSA

Burleigh County, ND
Morton County, ND

Bloomington, IN MSA

Monroe County, IN

Bloomington–Normal, IL MSA

McLean County, IL

Boise City, ID MSA

Ada County, ID

Canyon County, ID

**Boston, MA–NH PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA**

Boston, MA–NH PMSA

Bristol County, MA (part)

Berkley town, MA

Dighton town, MA

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Essex town, MA

Gloucester city, MA

Hamilton town, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Manchester town, MA

Marblehead town, MA

Middleton town, MA

Nahant town, MA

Newbury town, MA

Newburyport city, MA

Peabody city, MA

Rockport town, MA

Rowley town, MA

Salem city, MA

Salisbury town, MA

Saugus town, MA

Swampscott town, MA

Topsfield town, MA

Wenham town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Holliston town, MA

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Lincoln town, MA

Littleton town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Sherborn town, MA

Shirley town, MA

Somerville city, MA

Stoneham town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Middlesex County, MA (part)

Stow town, MA

Sudbury town, MA

Townsend town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

Winchester town, MA

Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Cohasset town, MA

Dedham town, MA

Dover town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Millis town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Plainville town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Norwell town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

Suffolk County, MA

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA

Blackstone town, MA

Bolton town, MA

Harvard town, MA

Hopedale town, MA

Lancaster town, MA

Mendon town, MA

Milford town, MA

Millville town, MA

Southborough town, MA

Upton town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Rockingham County, NH (part)

Seabrook town, NH

South Hampton town, NH

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Halifax town, MA

Hanson town, MA

Lakeville town, MA

Middleborough town, MA

Plympton town, MA

West Bridgewater town, MA

Whitman town, MA

Fitchburg–Leominster, MA PMSA

Middlesex County, MA (part)

Ashby town, MA

Worcester County, MA (part)

Ashburnham town, MA

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lunenburg town, MA

Templeton town, MA

Westminster town, MA

Winchendon town, MA

Lawrence, MA–NH PMSA

Essex County, MA (part)

Andover town, MA

Boxford town, MA

Georgetown town, MA

Groveland town, MA

Haverhill city, MA

Lawrence city, MA

Merrimac town, MA

Methuen city, MA

North Andover town, MA

West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH

Chester town, NH

Danville town, NH

Derry town, NH

Fremont town, NH

Hampstead town, NH

Kingston town, NH

Newton town, NH

Plaistow town, NH

Raymond town, NH

Salem town, NH

Sandown town, NH

Windham town, NH

Lowell, MA–NH PMSA

Middlesex County, MA (part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Dunstable town, MA

Groton town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Tyngsborough town, MA

Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Manchester, NH PMSA
 Hillsborough County, NH (part)
 Bedford town, NH
 Goffstown town, NH
 Manchester city, NH
 Weare town, NH
 Merrimack County, NH (part)
 Allentown town, NH
 Hooksett town, NH
 Rockingham County, NH (part)
 Auburn town, NH
 Candia town, NH
 Londonderry town, NH
 Nashua, NH PMSA
 Hillsborough County, NH (part)
 Amherst town, NH
 Brookline town, NH
 Greenville town, NH
 Hollis town, NH
 Hudson town, NH
 Litchfield town, NH
 Mason town, NH
 Merrimack town, NH
 Milford town, NH
 Mont Vernon town, NH
 Nashua city, NH
 New Ipswich town, NH
 Wilton town, NH
 New Bedford, MA PMSA
 Bristol County, MA (part)
 Acushnet town, MA
 Dartmouth town, MA
 Fairhaven town, MA
 Freetown town, MA
 New Bedford city, MA
 Plymouth County, MA (part)
 Marion town, MA
 Mattapoisett town, MA
 Rochester town, MA
 Portsmouth–Rochester, NH–ME PMSA
 York County, ME (part)
 Berwick town, ME
 Eliot town, ME
 Kittery town, ME
 South Berwick town, ME
 York town, ME
 Rockingham County, NH (part)
 Brentwood town, NH
 East Kingston town, NH
 Epping town, NH
 Exeter town, NH
 Greenland town, NH
 Hampton town, NH
 Hampton Falls town, NH
 Kensington town, NH
 New Castle town, NH
 Newfields town, NH
 Newington town, NH
 Newmarket town, NH
 North Hampton town, NH
 Portsmouth city, NH
 Rye town, NH
 Stratham town, NH
 Strafford County, NH (part)
 Barrington town, NH
 Dover city, NH
 Durham town, NH
 Farmington town, NH
 Lee town, NH
 Madbury town, NH
 Milton town, NH
 Rochester city, NH
 Rollinsford town, NH
 Somersworth city, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Worcester, MA–CT PMSA
 Windham County, CT (part)
 Thompson town, CT
 Hampden County, MA (part)
 Holland town, MA
 Worcester County, MA (part)
 Auburn town, MA
 Barre town, MA
 Boylston town, MA
 Brookfield town, MA
 Charlton town, MA
 Clinton town, MA
 Douglas town, MA
 Dudley town, MA
 East Brookfield town, MA
 Grafton town, MA
 Holden town, MA
 Leicester town, MA
 Millbury town, MA
 Northborough town, MA
 Northbridge town, MA
 North Brookfield town, MA
 Oakham town, MA
 Oxford town, MA
 Paxton town, MA
 Princeton town, MA
 Rutland town, MA
 Shrewsbury town, MA
 Southbridge town, MA
 Spencer town, MA
 Sterling town, MA
 Sturbridge town, MA
 Sutton town, MA
 Uxbridge town, MA
 Webster town, MA
 Westborough town, MA
 West Boylston town, MA
 West Brookfield town, MA
 Worcester city, MA

**Boulder–Longmont, CO PMSA—see
Denver–Boulder–Greeley, CO CMSA****Brazoria, TX PMSA—see Houston–
Galveston–Brazoria, TX CMSA****Bremerton, WA PMSA—see Seattle–
Tacoma–Bremerton, WA CMSA****Bridgeport, CT PMSA—see New York–
Northern New Jersey–Long Island, NY–
NJ–CT–PA CMSA****Brockton, MA PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Brownsville–Harlingen–San Benito, TX MSA**
Cameron County, TX**Bryan–College Station, TX MSA**
Brazos County, TX**Buffalo–Niagara Falls, NY MSA**
Erie County, NY
Niagara County, NY

Burlington, VT MSA
 Chittenden County, VT (part)
 Burlington city, VT
 Charlotte town, VT
 Colchester town, VT
 Essex Junction village, VT
 Essex town balance, VT
 Hinesburg town, VT
 Jericho town, VT
 Jericho village, VT
 Milton town, VT
 Milton village, VT
 Richmond town, VT
 St. George town, VT
 Shelburne town, VT

Burlington, VT MSA—Con.

Chittenden County, VT (part)—Con.
 South Burlington city, VT
 Williston town, VT
 Winooski city, VT
 Franklin County, VT (part)
 Fairfax town, VT
 Georgia town, VT
 St. Albans city, VT
 St. Albans town, VT
 Swanton town, VT
 Swanton village, VT
 Grand Isle County, VT (part)
 Grand Isle town, VT
 South Hero town, VT

Canton–Massillon, OH MSA

Carroll County, OH
 Stark County, OH

Casper, WY MSA

Natrona County, WY

Cedar Rapids, IA MSA

Linn County, IA

Champaign–Urbana, IL MSA

Champaign County, IL

Charleston–North Charleston, SC MSA

Berkeley County, SC
 Charleston County, SC
 Dorchester County, SC

Charleston, WV MSA

Kanawha County, WV
 Putnam County, WV

Charlotte–Gastonia–Rock Hill, NC–SC MSA

Cabarrus County, NC
 Gaston County, NC
 Lincoln County, NC
 Mecklenburg County, NC
 Rowan County, NC
 Union County, NC
 York County, SC

Charlottesville, VA MSA

Albemarle County, VA
 Fluvanna County, VA
 Greene County, VA
 Charlottesville city, VA

Chattanooga, TN–GA MSA

Catoosa County, GA
 Dade County, GA
 Walker County, GA
 Hamilton County, TN
 Marion County, TN

Cheyenne, WY MSA

Laramie County, WY

**Chicago, IL PMSA—see Chicago–Gary–
Kenosha, IL–IN–WI CMSA****Chicago–Gary–Kenosha, IL–IN–WI CMSA**

Chicago, IL PMSA
 Cook County, IL
 DeKalb County, IL
 DuPage County, IL
 Grundy County, IL
 Kane County, IL
 Kendall County, IL
 Lake County, IL
 McHenry County, IL
 Will County, IL
 Gary, IN PMSA
 Lake County, IN
 Porter County, IN
 Kankakee, IL PMSA
 Kankakee County, IL

Chicago–Gary–Kenosha, IL–IN–WI CMSA—Con.

Kenosha, WI PMSA
Kenosha County, WI

Chico–Paradise, CA MSA

Butte County, CA

Cincinnati, OH–KY–IN PMSA—see

Cincinnati–Hamilton, OH–KY–IN CMSA

Cincinnati–Hamilton, OH–KY–IN CMSA

Cincinnati, OH–KY–IN PMSA
Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH
Hamilton–Middletown, OH PMSA
Butler County, OH

Clarksville–Hopkinsville, TN–KY MSA

Christian County, KY
Montgomery County, TN

Cleveland–Lorain–Elyria, OH PMSA—see

Cleveland–Akron, OH CMSA

Cleveland–Akron, OH CMSA

Akron, OH PMSA
Portage County, OH
Summit County, OH
Cleveland–Lorain–Elyria, OH PMSA
Ashtabula County, OH
Cuyahoga County, OH
Geauga County, OH
Lake County, OH
Lorain County, OH
Medina County, OH

Colorado Springs, CO MSA

El Paso County, CO

Columbia, MO MSA

Boone County, MO

Columbia, SC MSA

Lexington County, SC
Richland County, SC

Columbus, GA–AL MSA

Russell County, AL
Chattahoochee County, GA
Harris County, GA
Muscogee County, GA

Columbus, OH MSA

Delaware County, OH
Fairfield County, OH
Franklin County, OH
Licking County, OH
Madison County, OH
Pickaway County, OH

Corpus Christi, TX MSA

Nueces County, TX
San Patricio County, TX

Cumberland, MD–WV MSA

Allegany County, MD
Mineral County, WV

Dallas, TX PMSA—see Dallas–Fort Worth, TX CMSA

Dallas–Fort Worth, TX CMSA

Dallas, TX PMSA
Collin County, TX
Dallas County, TX
Denton County, TX
Ellis County, TX
Henderson County, TX
Hunt County, TX
Kaufman County, TX
Rockwall County, TX
Fort Worth–Arlington, TX PMSA
Hood County, TX
Johnson County, TX
Parker County, TX
Tarrant County, TX

Danbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Danville, VA MSA

Pittsylvania County, VA
Danville city, VA

Davenport–Moline–Rock Island, IA–IL MSA

Henry County, IL
Rock Island County, IL
Scott County, IA

Dayton–Springfield, OH MSA

Clark County, OH
Greene County, OH
Miami County, OH
Montgomery County, OH

Daytona Beach, FL MSA

Flagler County, FL
Volusia County, FL

Decatur, AL MSA

Lawrence County, AL
Morgan County, AL

Decatur, IL MSA

Macon County, IL

Denver, CO PMSA—see Denver–Boulder–Greeley, CO CMSA

Denver–Boulder–Greeley, CO CMSA

Boulder–Longmont, CO PMSA
Boulder County, CO
Denver, CO PMSA
Adams County, CO
Arapahoe County, CO
Denver County, CO
Douglas County, CO
Jefferson County, CO
Greeley, CO PMSA
Weld County, CO

Des Moines, IA MSA

Dallas County, IA
Polk County, IA
Warren County, IA

Detroit, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Detroit–Ann Arbor–Flint, MI CMSA

Ann Arbor, MI PMSA
Lenawee County, MI
Livingston County, MI
Washtenaw County, MI
Detroit, MI PMSA
Lapeer County, MI
Macomb County, MI
Monroe County, MI
Oakland County, MI
St. Clair County, MI
Wayne County, MI

Detroit–Ann Arbor–Flint, MI CMSA—Con.

Flint, MI PMSA
Genesee County, MI

Dothan, AL MSA

Dale County, AL
Houston County, AL

Dover, DE MSA

Kent County, DE

Dubuque, IA MSA

Dubuque County, IA

Duluth–Superior, MN–WI MSA

St. Louis County, MN
Douglas County, WI

Dutchess County, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Eau Claire, WI MSA

Chippewa County, WI
Eau Claire County, WI

El Paso, TX MSA

El Paso County, TX

Elkhart–Goshen, IN MSA

Elkhart County, IN

Elmira, NY MSA

Chemung County, NY

Enid, OK MSA

Garfield County, OK

Erie, PA MSA

Erie County, PA

Eugene–Springfield, OR MSA

Lane County, OR

Evansville–Henderson, IN–KY MSA

Posey County, IN
Vanderburgh County, IN
Warrick County, IN
Henderson County, KY

Fargo–Moorhead, ND–MN MSA

Clay County, MN
Cass County, ND

Fayetteville, NC MSA

Cumberland County, NC

Fayetteville–Springdale–Rogers, AR MSA

Benton County, AR
Washington County, AR

Fitchburg–Leominster, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Flint, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Florence, AL MSA

Colbert County, AL
Lauderdale County, AL

Florence, SC MSA

Florence County, SC

Fort Collins–Loveland, CO MSA

Larimer County, CO

Fort Lauderdale, FL PMSA—see Miami–Fort Lauderdale, FL CMSA

Fort Myers–Cape Coral, FL MSA

Lee County, FL

Fort Pierce–Port St. Lucie, FL MSA

Martin County, FL
St. Lucie County, FL

Fort Smith, AR—OK MSA

Crawford County, AR
Sebastian County, AR
Sequoyah County, OK

Fort Walton Beach, FL MSA

Okaloosa County, FL

Fort Wayne, IN MSA

Adams County, IN
Allen County, IN
De Kalb County, IN
Huntington County, IN
Wells County, IN
Whitley County, IN

Fort Worth—Arlington, TX PMSA—see

Dallas—Fort Worth, TX CMSA

Fresno, CA MSA

Fresno County, CA
Madera County, CA

Gadsden, AL MSA

Etowah County, AL

Gainesville, FL MSA

Alachua County, FL

Galveston—Texas City, TX PMSA—see

Houston—Galveston—Brazoria, TX CMSA

Gary, IN PMSA—see Chicago—Gary—

Kenosha, IL—IN—WI CMSA

Glens Falls, NY MSA

Warren County, NY
Washington County, NY

Goldsboro, NC MSA

Wayne County, NC

Grand Forks, ND—MN MSA

Polk County, MN
Grand Forks County, ND

Grand Rapids—Muskegon—Holland, MI MSA

Allegan County, MI
Kent County, MI
Muskegon County, MI
Ottawa County, MI

Great Falls, MT MSA

Cascade County, MT

Greeley, CO PMSA—see Denver—Boulder—

Greeley, CO CMSA

Green Bay, WI MSA

Brown County, WI

Greensboro—Winston-Salem—High Point, NC MSA

Alamance County, NC
Davidson County, NC
Davie County, NC
Forsyth County, NC
Guilford County, NC
Randolph County, NC
Stokes County, NC
Yadkin County, NC

Greenville, NC MSA

Pitt County, NC

Greenville—Spartanburg—Anderson, SC MSA

Anderson County, SC
Cherokee County, SC
Greenville County, SC
Pickens County, SC
Spartanburg County, SC

Hagerstown, MD PMSA—see Washington—

Baltimore, DC—MD—VA—WV CMSA

Hamilton—Middletown, OH PMSA—see
Cincinnati—Hamilton, OH—KY—IN CMSA

Harrisburg—Lebanon—Carlisle, PA MSA

Cumberland County, PA
Dauphin County, PA
Lebanon County, PA
Perry County, PA

Hartford, CT MSA

Hartford County, CT (part)
Avon town, CT
Berlin town, CT
Bloomfield town, CT
Bristol city, CT
Burlington town, CT
Canton town, CT
East Granby town, CT
East Hartford town, CT
East Windsor town, CT
Enfield town, CT
Farmington town, CT
Glastonbury town, CT
Granby town, CT
Hartford city, CT
Manchester town, CT
Marlborough town, CT
New Britain city, CT
Newington town, CT
Plainville town, CT
Rocky Hill town, CT
Simsbury town, CT
Southington town, CT
South Windsor town, CT
Suffield town, CT
West Hartford town, CT
Wethersfield town, CT
Windsor town, CT
Windsor Locks town, CT

Litchfield County, CT (part)
Barkhamsted town, CT
Harwinton town, CT
New Hartford town, CT
Plymouth town, CT
Winchester town, CT

Middlesex County, CT (part)
Cromwell town, CT
Durham town, CT
East Haddam town, CT
East Hampton town, CT
Haddam town, CT
Middlefield town, CT
Middletown city, CT
Portland town, CT

New London County, CT (part)
Colchester town, CT
Lebanon town, CT

Tolland County, CT (part)
Andover town, CT
Bolton town, CT
Columbia town, CT
Coventry town, CT
Ellington town, CT
Hebron town, CT
Mansfield town, CT
Somers town, CT
Stafford town, CT
Tolland town, CT
Vernon town, CT
Willington town, CT

Windham County, CT (part)
Ashford town, CT
Chaplin town, CT
Windham town, CT

Hickory—Morganton, NC MSA

Alexander County, NC
Burke County, NC
Caldwell County, NC
Catawba County, NC

Honolulu, HI MSA

Honolulu County, HI

Houma, LA MSA

Lafourche Parish, LA
Terrebonne Parish, LA

Houston, TX PMSA—see Houston—Galveston—Brazoria, TX CMSA

Houston—Galveston—Brazoria, TX CMSA

Brazoria, TX PMSA
Brazoria County, TX
Galveston—Texas City, TX PMSA
Galveston County, TX
Houston, TX PMSA
Chambers County, TX
Fort Bend County, TX
Harris County, TX
Liberty County, TX
Montgomery County, TX
Waller County, TX

Huntington—Ashland, WV—KY—OH MSA

Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Huntsville, AL MSA

Limestone County, AL
Madison County, AL

Indianapolis, IN MSA

Boone County, IN
Hamilton County, IN
Hancock County, IN
Hendricks County, IN
Johnson County, IN
Madison County, IN
Marion County, IN
Morgan County, IN
Shelby County, IN

Iowa City, IA MSA

Johnson County, IA

Jackson, MI MSA

Jackson County, MI

Jackson, MS MSA

Hinds County, MS
Madison County, MS
Rankin County, MS

Jackson, TN MSA

Madison County, TN

Jacksonville, FL MSA

Clay County, FL
Duval County, FL
Nassau County, FL
St. Johns County, FL

Jacksonville, NC MSA

Onslow County, NC

Jamestown, NY MSA

Chautauqua County, NY

Janesville—Beloit, WI MSA

Rock County, WI

Jersey City, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Johnson City–Kingsport–Bristol, TN–VA MSA**

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol city, VA

Johnstown, PA MSA

Cambria County, PA
Somerset County, PA

Joplin, MO MSA

Jasper County, MO
Newton County, MO

Kalamazoo–Battle Creek, MI MSA

Calhoun County, MI
Kalamazoo County, MI
Van Buren County, MI

Kankakee, IL PMSA—see Chicago–Gary–Kenosha, IL–IN–WI CMSA**Kansas City, MO–KS MSA**

Johnson County, KS
Leavenworth County, KS
Miami County, KS
Wyandotte County, KS
Cass County, MO
Clay County, MO
Clinton County, MO
Jackson County, MO
Lafayette County, MO
Platte County, MO
Ray County, MO

Kenosha, WI PMSA—see Chicago–Gary–Kenosha, IL–IN–WI CMSA**Killeen–Temple, TX MSA**

Bell County, TX
Coryell County, TX

Knoxville, TN MSA

Anderson County, TN
Blount County, TN
Knox County, TN
Loudon County, TN
Sevier County, TN
Union County, TN

Kokomo, IN MSA

Howard County, IN
Tipton County, IN

La Crosse, WI–MN MSA

Houston County, MN
La Crosse County, WI

Lafayette, LA MSA

Acadia Parish, LA
Lafayette Parish, LA
St. Landry Parish, LA
St. Martin Parish, LA

Lafayette, IN MSA

Clinton County, IN
Tippecanoe County, IN

Lake Charles, LA MSA

Calcasieu Parish, LA

Lakeland–Winter Haven, FL MSA

Polk County, FL

Lancaster, PA MSA

Lancaster County, PA

Lansing–East Lansing, MI MSA

Clinton County, MI
Eaton County, MI
Ingham County, MI

Laredo, TX MSA

Webb County, TX

Las Cruces, NM MSA

Dona Ana County, NM

Las Vegas, NV–AZ MSA

Mohave County, AZ
Clark County, NV
Nye County, NV

Lawrence, KS MSA

Douglas County, KS

Lawrence, MA–NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Lawton, OK MSA**

Comanche County, OK

Lewiston–Auburn, ME MSA

Androscoggin County, ME (part)
Auburn city, ME
Greene town, ME
Lewiston city, ME
Lisbon town, ME
Mechanic Falls town, ME
Poland town, ME
Sabattus town, ME
Turner town, ME
Wales town, ME

Lexington, KY MSA

Bourbon County, KY
Clark County, KY
Fayette County, KY
Jessamine County, KY
Madison County, KY
Scott County, KY
Woodford County, KY

Lima, OH MSA

Allen County, OH
Auglaize County, OH

Lincoln, NE MSA

Lancaster County, NE

Little Rock–North Little Rock, AR MSA

Faulkner County, AR
Lonoke County, AR
Pulaski County, AR
Saline County, AR

Longview–Marshall, TX MSA

Gregg County, TX
Harrison County, TX
Upshur County, TX

Los Angeles–Riverside–Orange County, CA CMSA

Los Angeles–Long Beach, CA PMSA
Los Angeles County, CA
Orange County, CA PMSA
Orange County, CA
Riverside–San Bernardino, CA PMSA
Riverside County, CA
San Bernardino County, CA
Ventura, CA PMSA
Ventura County, CA

Los Angeles–Long Beach, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA**Louisville, KY–IN MSA**

Clark County, IN
Floyd County, IN
Harrison County, IN
Scott County, IN
Bullitt County, KY
Jefferson County, KY
Oldham County, KY

Lowell, MA–NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Lubbock, TX MSA**

Lubbock County, TX

Lynchburg, VA MSA

Amherst County, VA
Bedford County, VA
Campbell County, VA
Bedford city, VA
Lynchburg city, VA

Macon, GA MSA

Bibb County, GA
Houston County, GA
Jones County, GA
Peach County, GA
Twiggs County, GA

Madison, WI MSA

Dane County, WI

Manchester, NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Mansfield, OH MSA**

Crawford County, OH
Richland County, OH

McAllen–Edinburg–Mission, TX MSA

Hidalgo County, TX

Medford–Ashland, OR MSA

Jackson County, OR

Melbourne–Titusville–Palm Bay, FL MSA

Brevard County, FL

Memphis, TN–AR–MS MSA

Crittenden County, AR
DeSoto County, MS
Fayette County, TN
Shelby County, TN
Tipton County, TN

Merced, CA MSA

Merced County, CA

Miami–Fort Lauderdale, FL CMSA

Fort Lauderdale, FL PMSA
Broward County, FL
Miami, FL PMSA
Dade County, FL

Miami, FL PMSA—see Miami–Fort Lauderdale, FL CMSA**Middlesex–Somerset–Hunterdon, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****Milwaukee–Waukesha, WI PMSA—see Milwaukee–Racine, WI CMSA****Milwaukee–Racine, WI CMSA**

Milwaukee–Waukesha, WI PMSA
Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI

Milwaukee–Racine, WI CMSA—Con.

Racine, WI PMSA
Racine County, WI

Minneapolis–St. Paul, MN–WI MSA

Anoka County, MN
Carver County, MN
Chisago County, MN
Dakota County, MN
Hennepin County, MN
Isanti County, MN
Ramsey County, MN
Scott County, MN
Sherburne County, MN
Washington County, MN
Wright County, MN
Pierce County, WI
St. Croix County, WI

Mobile, AL MSA

Baldwin County, AL
Mobile County, AL

Modesto, CA MSA

Stanislaus County, CA

Monmouth–Ocean, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Monroe, LA MSA**

Ouachita Parish, LA

Montgomery, AL MSA

Autauga County, AL
Elmore County, AL
Montgomery County, AL

Muncie, IN MSA

Delaware County, IN

Myrtle Beach, SC MSA

Horry County, SC

Naples, FL MSA

Collier County, FL

Nashua, NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Nashville, TN MSA**

Cheatham County, TN
Davidson County, TN
Dickson County, TN
Robertson County, TN
Rutherford County, TN
Sumner County, TN
Williamson County, TN
Wilson County, TN

Nassau–Suffolk, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New Bedford, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****New Haven–Meriden, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New London–Norwich, CT–RI MSA**

Middlesex County, CT (part)
Fenwick borough, CT
Old Saybrook town, CT
New London County, CT (part)
Bozrah town, CT
East Lyme town, CT
Franklin town, CT
Griswold town balance, CT
Groton city, CT
Groton town balance, CT

New London–Norwich, CT–RI MSA—Con.

New London County, CT (part)—Con.
Groton Long Point borough, CT
Jewett City borough, CT
Ledyard town, CT
Lisbon town, CT
Montville town, CT
New London city, CT
North Stonington town, CT
Norwich city, CT
Old Lyme town, CT
Preston town, CT
Salem town, CT
Sprague town, CT
Stonington borough, CT
Stonington town, CT
Waterford town, CT
Windham County, CT (part)
Canterbury town, CT
Plainfield town, CT
Washington County, RI (part)
Hopkinton town, RI
Westerly town, RI

New Orleans, LA MSA

Jefferson Parish, LA
Orleans Parish, LA
Plaquemines Parish, LA
St. Bernard Parish, LA
St. Charles Parish, LA
St. James Parish, LA
St. John the Baptist Parish, LA
St. Tammany Parish, LA

New York, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**

Bergen–Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (part)
Bridgeport city, CT
Easton town, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (part)
Ansonia city, CT
Beacon Falls town, CT
Derby city, CT
Milford city (balance), CT
Oxford town, CT
Seymour town, CT
Woodmont borough, CT
Danbury, CT PMSA
Fairfield County, CT (part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown borough, CT
Newtown town, CT
Redding town, CT
Ridgefield town, CT
Sherman town, CT
Litchfield County, CT (part)
Bridgewater town, CT
New Milford town, CT
Roxbury town, CT
Washington town, CT
Dutchess County, NY PMSA
Dutchess County, NY

New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA—Con.

Jersey City, NJ PMSA
Hudson County, NJ
Middlesex–Somerset–Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth–Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau–Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY
New Haven–Meriden, CT PMSA
Middlesex County, CT (part)
Clinton town, CT
Killingworth town, CT
New Haven County, CT (part)
Bethany town, CT
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT
Woodbridge town, CT
New York, NY PMSA
Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY
Queens County, NY
Richmond County, NY
Rockland County, NY
Westchester County, NY
Newark, NJ PMSA
Essex County, NJ
Morris County, NJ
Sussex County, NJ
Union County, NJ
Warren County, NJ
Newburgh, NY–PA PMSA
Orange County, NY
Pike County, PA
Stamford–Norwalk, CT PMSA
Fairfield County, CT (part)
Darien town, CT
Greenwich town, CT
New Canaan town, CT
Norwalk city, CT
Stamford city, CT
Weston town, CT
Westport town, CT
Wilton town, CT
Trenton, NJ PMSA
Mercer County, NJ
Waterbury, CT PMSA
Litchfield County, CT (part)
Bethlehem town, CT
Thomaston town, CT
Watertown town, CT
Woodbury town, CT
New Haven County, CT (part)
Middlebury town, CT
Naugatuck borough, CT
Prospect town, CT
Southbury town, CT
Waterbury city, CT
Wolcott town, CT

Newark, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Newburgh, NY–PA PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Norfolk–Virginia Beach–Newport News, VA–NC MSA

Currituck County, NC
Gloucester County, VA
Isle of Wight County, VA
James City County, VA
Mathews County, VA
York County, VA
Chesapeake city, VA
Hampton city, VA
Newport News city, VA
Norfolk city, VA
Poquoson city, VA
Portsmouth city, VA
Suffolk city, VA
Virginia Beach city, VA
Williamsburg city, VA

Oakland, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Ocala, FL MSA

Marion County, FL

Odessa–Midland, TX MSA

Ector County, TX
Midland County, TX

Oklahoma City, OK MSA

Canadian County, OK
Cleveland County, OK
Logan County, OK
McClain County, OK
Oklahoma County, OK
Pottawatomie County, OK

Olympia, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Omaha, NE–IA MSA

Pottawattamie County, IA
Cass County, NE
Douglas County, NE
Sarpy County, NE
Washington County, NE

Orange County, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Orlando, FL MSA

Lake County, FL
Orange County, FL
Osceola County, FL
Seminole County, FL

Owensboro, KY MSA

Daviess County, KY

Panama City, FL MSA

Bay County, FL

Parkersburg–Marietta, WV–OH MSA

Washington County, OH
Wood County, WV

Pensacola, FL MSA

Escambia County, FL
Santa Rosa County, FL

Peoria–Pekin, IL MSA

Peoria County, IL
Tazewell County, IL
Woodford County, IL

Philadelphia, PA–NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Atlantic–Cape May, NJ PMSA

Atlantic County, NJ
Cape May County, NJ

Philadelphia, PA–NJ PMSA

Burlington County, NJ
Camden County, NJ
Gloucester County, NJ
Salem County, NJ
Bucks County, PA
Chester County, PA
Delaware County, PA
Montgomery County, PA

Philadelphia County, PA

Vineland–Millville–Bridgeton, NJ PMSA
Cumberland County, NJ

Wilmington–Newark, DE–MD PMSA
New Castle County, DE
Cecil County, MD

Phoenix–Mesa, AZ MSA

Maricopa County, AZ
Pinal County, AZ

Pine Bluff, AR MSA

Jefferson County, AR

Pittsburgh, PA MSA

Allegheny County, PA
Beaver County, PA
Butler County, PA
Fayette County, PA
Washington County, PA
Westmoreland County, PA

Pittsfield, MA MSA

Berkshire County, MA (part)
Adams town, MA
Cheshire town, MA
Dalton town, MA
Hinsdale town, MA
Lanesborough town, MA
Lee town, MA
Lenox town, MA
Pittsfield city, MA
Richmond town, MA
Stockbridge town, MA

Portland, ME MSA

Cumberland County, ME (part)
Cape Elizabeth town, ME
Casco town, ME
Cumberland town, ME
Falmouth town, ME
Freeport town, ME
Gorham town, ME
Gray town, ME
North Yarmouth town, ME
Portland city, ME
Raymond town, ME
Scarborough town, ME
South Portland city, ME
Standish town, ME
Westbrook city, ME
Windham town, ME
Yarmouth town, ME

York County, ME (part)

Buxton town, ME
Hollis town, ME
Limington town, ME
Old Orchard Beach town, ME

Portland–Vancouver, OR–WA PMSA—see Portland–Salem, OR–WA CMSA

Portland–Salem, OR–WA CMSA

Portland–Vancouver, OR–WA PMSA

Clackamas County, OR
Columbia County, OR
Multnomah County, OR
Washington County, OR
Yamhill County, OR
Clark County, WA

Salem, OR PMSA

Marion County, OR
Polk County, OR

Portsmouth–Rochester, NH–ME PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Providence–Fall River–Warwick, RI–MA MSA

Bristol County, MA (part)
Attleboro city, MA
Fall River city, MA
North Attleborough town, MA
Rehoboth town, MA
Seekonk town, MA
Somerset town, MA
Swansea town, MA
Westport town, MA
Bristol County, RI
Barrington town, RI
Bristol town, RI
Warren town, RI
Kent County, RI
Coventry town, RI
East Greenwich town, RI
Warwick city, RI
West Greenwich town, RI
West Warwick town, RI
Newport County, RI (part)
Jamestown town, RI
Little Compton town, RI
Tiverton town, RI

Providence County, RI
Burrillville town, RI
Central Falls city, RI
Cranston city, RI
Cumberland town, RI
East Providence city, RI
Foster town, RI
Glocester town, RI
Johnston town, RI
Lincoln town, RI
North Providence town, RI
North Smithfield town, RI
Pawtucket city, RI
Providence city, RI
Scituate town, RI
Smithfield town, RI
Woonsocket city, RI
Washington County, RI (part)
Charlestown town, RI
Exeter town, RI
Narragansett town, RI
North Kingstown town, RI
Richmond town, RI
South Kingstown town, RI

Provo–Orem, UT MSA

Utah County, UT

Pueblo, CO MSA

Pueblo County, CO

Punta Gorda, FL MSA

Charlotte County, FL

Racine, WI PMSA—see Milwaukee—Racine, WI CMSA

Raleigh—Durham—Chapel Hill, NC MSA

Chatham County, NC
Durham County, NC
Franklin County, NC
Johnston County, NC
Orange County, NC
Wake County, NC

Rapid City, SD MSA

Pennington County, SD

Reading, PA MSA

Berks County, PA

Redding, CA MSA

Shasta County, CA

Reno, NV MSA

Washoe County, NV

Richland—Kennewick—Pasco, WA MSA

Benton County, WA
Franklin County, WA

Richmond—Petersburg, VA MSA

Charles City County, VA
Chesterfield County, VA
Dinwiddie County, VA
Goochland County, VA
Hanover County, VA
Henrico County, VA
New Kent County, VA
Powhatan County, VA
Prince George County, VA
Colonial Heights city, VA
Hopewell city, VA
Petersburg city, VA
Richmond city, VA

Riverside—San Bernardino, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Roanoke, VA MSA

Botetourt County, VA
Roanoke County, VA
Roanoke city, VA
Salem city, VA

Rochester, MN MSA

Olmsted County, MN

Rochester, NY MSA

Genesee County, NY
Livingston County, NY
Monroe County, NY
Ontario County, NY
Orleans County, NY
Wayne County, NY

Rockford, IL MSA

Boone County, IL
Ogle County, IL
Winnebago County, IL

Rocky Mount, NC MSA

Edgecombe County, NC
Nash County, NC

Sacramento, CA PMSA—see Sacramento—Yolo, CA CMSA

Sacramento—Yolo, CA CMSA

Sacramento, CA PMSA
El Dorado County, CA
Placer County, CA
Sacramento County, CA
Yolo, CA PMSA
Yolo County, CA

Saginaw—Bay City—Midland, MI MSA

Bay County, MI
Midland County, MI
Saginaw County, MI

St. Cloud, MN MSA

Benton County, MN
Stearns County, MN

St. Joseph, MO MSA

Andrew County, MO
Buchanan County, MO

St. Louis, MO—IL MSA

Clinton County, IL
Jersey County, IL
Madison County, IL
Monroe County, IL
St. Clair County, IL
Franklin County, MO
Jefferson County, MO
Lincoln County, MO
St. Charles County, MO
St. Louis County, MO
Warren County, MO
St. Louis city, MO

Salem, OR PMSA—see Portland—Salem, OR—WA CMSA

Salinas, CA MSA

Monterey County, CA

Salt Lake City—Ogden, UT MSA

Davis County, UT
Salt Lake County, UT
Weber County, UT

San Angelo, TX MSA

Tom Green County, TX

San Antonio, TX MSA

Bexar County, TX
Comal County, TX
Guadalupe County, TX
Wilson County, TX

San Diego, CA MSA

San Diego County, CA

San Francisco, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

San Francisco—Oakland—San Jose, CA CMSA

Oakland, CA PMSA
Alameda County, CA
Contra Costa County, CA
San Francisco, CA PMSA
Marin County, CA
San Francisco County, CA
San Mateo County, CA
San Jose, CA PMSA
Santa Clara County, CA
Santa Cruz—Watsonville, CA PMSA
Santa Cruz County, CA
Santa Rosa, CA PMSA
Sonoma County, CA
Vallejo—Fairfield—Napa, CA PMSA
Napa County, CA
Solano County, CA

San Jose, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

San Luis Obispo—Atascadero—Paso Robles, CA MSA

San Luis Obispo County, CA

Santa Barbara—Santa Maria—Lompoc, CA MSA

Santa Barbara County, CA

Santa Cruz—Watsonville, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Santa Fe, NM MSA

Los Alamos County, NM
Santa Fe County, NM

Santa Rosa, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Sarasota—Bradenton, FL MSA

Manatee County, FL
Sarasota County, FL

Savannah, GA MSA

Bryan County, GA
Chatham County, GA
Effingham County, GA

Scranton—Wilkes-Barre—Hazleton, PA MSA

Columbia County, PA
Lackawanna County, PA
Luzerne County, PA
Wyoming County, PA

Seattle—Bellevue—Everett, WA PMSA—see Seattle—Tacoma—Bremerton, WA CMSA

Seattle—Tacoma—Bremerton, WA CMSA

Bremerton, WA PMSA
Kitsap County, WA
Olympia, WA PMSA
Thurston County, WA
Seattle—Bellevue—Everett, WA PMSA
Island County, WA
King County, WA
Snohomish County, WA
Tacoma, WA PMSA
Pierce County, WA

Sharon, PA MSA

Mercer County, PA

Sheboygan, WI MSA

Sheboygan County, WI

Sherman—Denison, TX MSA

Grayson County, TX

Shreveport—Bossier City, LA MSA

Bossier Parish, LA
Caddo Parish, LA
Webster Parish, LA

Sioux City, IA—NE MSA

Woodbury County, IA
Dakota County, NE

Sioux Falls, SD MSA

Lincoln County, SD
Minnehaha County, SD

South Bend, IN MSA

St. Joseph County, IN

Spokane, WA MSA

Spokane County, WA

Springfield, IL MSA

Menard County, IL
Sangamon County, IL

Springfield, MO MSA

Christian County, MO
Greene County, MO
Webster County, MO

Springfield, MA MSA

Franklin County, MA (part)
Sunderland town, MA
Hampden County, MA (part)
Agawam city, MA
Chicopee city, MA

Springfield, MA MSA—Con.

Hampden County, MA (part)—Con.
 East Longmeadow town, MA
 Hampden town, MA
 Holyoke city, MA
 Longmeadow town, MA
 Ludlow town, MA
 Monson town, MA
 Montgomery town, MA
 Palmer town, MA
 Russell town, MA
 Southwick town, MA
 Springfield city, MA
 Westfield city, MA
 West Springfield town, MA
 Wilbraham town, MA
 Hampshire County, MA (part)
 Amherst town, MA
 Belchertown town, MA
 Easthampton town, MA
 Granby town, MA
 Hadley town, MA
 Hatfield town, MA
 Huntington town, MA
 Northampton city, MA
 Southampton town, MA
 South Hadley town, MA
 Ware town, MA
 Williamsburg town, MA

Stamford–Norwalk, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**State College, PA MSA**

Centre County, PA

Steubenville–Weirton, OH–WV MSA

Jefferson County, OH
 Brooke County, WV
 Hancock County, WV

Stockton–Lodi, CA MSA

San Joaquin County, CA

Sumter, SC MSA

Sumter County, SC

Syracuse, NY MSA

Cayuga County, NY
 Madison County, NY
 Onondaga County, NY
 Oswego County, NY

Tacoma, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA**Tallahassee, FL MSA**

Gadsden County, FL
 Leon County, FL

Tampa–St. Petersburg–Clearwater, FL MSA

Hernando County, FL
 Hillsborough County, FL
 Pasco County, FL
 Pinellas County, FL

Terre Haute, IN MSA

Clay County, IN
 Vermillion County, IN
 Vigo County, IN

Texarkana, TX–Texarkana, AR MSA

Miller County, AR
 Bowie County, TX

Toledo, OH MSA

Fulton County, OH
 Lucas County, OH
 Wood County, OH

Topeka, KS MSA

Shawnee County, KS

Trenton, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Tucson, AZ MSA**

Pima County, AZ

Tulsa, OK MSA

Creek County, OK
 Osage County, OK
 Rogers County, OK
 Tulsa County, OK
 Wagoner County, OK

Tuscaloosa, AL MSA

Tuscaloosa County, AL

Tyler, TX MSA

Smith County, TX

Utica–Rome, NY MSA

Herkimer County, NY
 Oneida County, NY

Vallejo–Fairfield–Napa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA**Ventura, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA****Victoria, TX MSA**

Victoria County, TX

Vineland–Millville–Bridgeton, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA**Visalia–Tulare–Porterville, CA MSA**

Tulare County, CA

Waco, TX MSA

McLennan County, TX

Washington, DC–MD–VA–WV PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA**Washington–Baltimore, DC–MD–VA–WV CMSA**

Baltimore, MD PMSA
 Anne Arundel County, MD
 Baltimore County, MD
 Carroll County, MD
 Harford County, MD
 Howard County, MD
 Queen Anne's County, MD
 Baltimore city, MD
 Hagerstown, MD PMSA
 Washington County, MD
 Washington, DC–MD–VA–WV PMSA
 District of Columbia, DC
 Calvert County, MD
 Charles County, MD
 Frederick County, MD
 Montgomery County, MD
 Prince George's County, MD
 Arlington County, VA
 Clarke County, VA
 Culpeper County, VA
 Fairfax County, VA

Washington–Baltimore, DC–MD–VA–WV CMSA—Con.

Washington, DC–MD–VA–WV PMSA—Con.
 Fauquier County, VA
 King George County, VA
 Loudoun County, VA
 Prince William County, VA
 Spotsylvania County, VA
 Stafford County, VA
 Warren County, VA
 Alexandria city, VA
 Fairfax city, VA
 Falls Church city, VA
 Fredericksburg city, VA
 Manassas city, VA
 Manassas Park city, VA
 Berkeley County, WV
 Jefferson County, WV

Waterbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Waterloo–Cedar Falls, IA MSA**

Black Hawk County, IA

Wausau, WI MSA

Marathon County, WI

West Palm Beach–Boca Raton, FL MSA

Palm Beach County, FL

Wheeling, WV–OH MSA

Belmont County, OH
 Marshall County, WV
 Ohio County, WV

Wichita, KS MSA

Butler County, KS
 Harvey County, KS
 Sedgwick County, KS

Wichita Falls, TX MSA

Archer County, TX
 Wichita County, TX

Williamsport, PA MSA

Lycoming County, PA

Wilmington–Newark, DE–MD PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA**Wilmington, NC MSA**

Brunswick County, NC
 New Hanover County, NC

Worcester, MA–CT PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Yakima, WA MSA**

Yakima County, WA

Yolo, CA PMSA—see Sacramento–Yolo, CA CMSA**York, PA MSA**

York County, PA

Youngstown–Warren, OH MSA

Columbiana County, OH
 Mahoning County, OH
 Trumbull County, OH

Yuba City, CA MSA

Sutter County, CA
 Yuba County, CA

Yuma, AZ MSA

Yuma County, AZ

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

- Printed reports [P]
- CD-ROM [C]
- Highlights online [+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through January 1996) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available March 1996 through May 1996) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available November 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

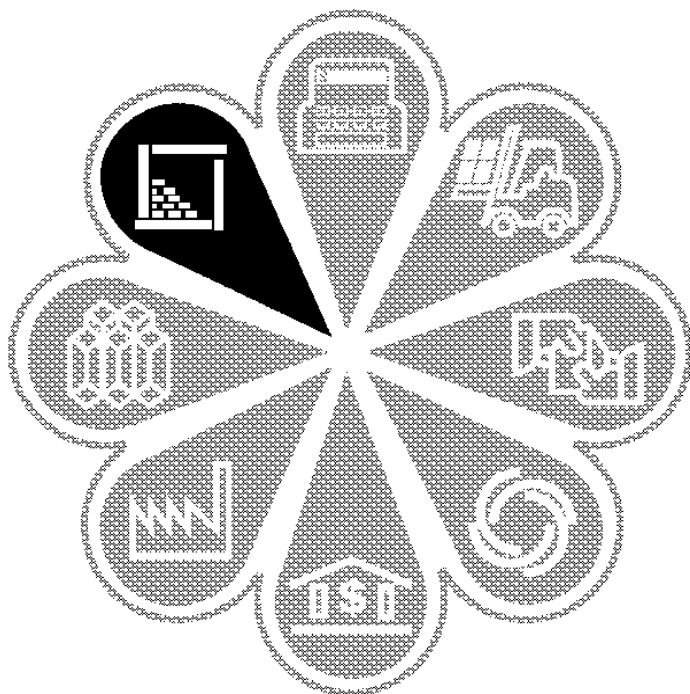
Census of Construction Industries

CC92-A-7

GEOGRAPHIC AREA SERIES

West South Central States

Arkansas, Louisiana, Oklahoma, Texas



Acknowledgments

Many persons participated in the various activities of the 1992 Census of Construction Industries. The overall planning and review of the census operations were performed by the Economic Census Staff of the Economic Planning and Coordination Division.

This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Tamara A. Cole**, **Jennifer L. Evans**, **Susan L. Hostetter**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke** and **Michael E. Kornbau**. The Systems Support Staff maintained the small computers and assisted in the management of computer output.

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Administration**

Everett M. Ehrlich, Under Secretary
for Economic Affairs



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

IV INTRODUCTION

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

CONSTRUCTION—GEOGRAPHIC AREA SERIES

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Assets and depreciation (gross book value):					
Beginning of year—buildings, machinery, and equipment	4				
End of year—total	2, 4	2	6	7	
End of year—buildings, machinery, and equipment	4				
Depreciation charges during year—buildings, machinery, and equipment	4				
Capital expenditures:					
Total capital expenditures	2, 4	2	6	7	11
New buildings—machinery and equipment	4				
Used buildings—machinery and equipment	4				
Communication services, costs for	3				
Employees:					
All employees—average number	1, 2, 3	2	6	7	11
Construction workers—average number	2, 3, 9	2, 9			
Construction workers—quarterly	3, 9	9			
Other employees—average number	3				
Other employees—quarterly	3				
Establishments:					
Number in business during year:					
All	1				
With payroll	1, 2, 3, 5, 9	2, 9	6	7	11
Without payroll	1				
Fringe benefits—legally required and voluntary expenditures	3				
Inventories	5				
Materials, components, supplies, and fuels—costs for	2, 3	2	6	7	11
Ownership—private or government owned	3				
Payroll:					
First-quarter, all employees	3				
Annual:					
All employees	2, 3	2	6	7	11
Construction workers	2, 3	2			
Other employees	3				
Power, fuels, and lubricants—costs for	3				
Proprietors and working partners:					
All establishments	1				
Establishments with payroll	1, 3				
Establishments without payroll	1				
Ratios, selected industry	10	10			
Receipts and value:					
Dollar value of business done:					
All establishments	1				
Establishments with payroll	1, 3		6	7	
Establishments without payroll	1				
Value of construction work, total	2, 3, 5, 8	2	6	7	11
For work subcontracted in from others	2, 3	2			
Other business receipts	3				

See footnotes at end of table.

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Receipts and value:—Con.					
Net value of construction work.	2, 3	2	6	7	11
Value added.	2, 3	2	6	7	11
Rental costs:					
Total.	2, 3	2	6	7	
For machinery and equipment.	3				
For buildings.	3				
Repairs to buildings and other structures.	3				
Repairs to machinery and equipment.	3				
Subcontract work to others, costs for.	2, 3	2	6	7	11
Type and class of construction ²	8				

Note: Data for 1987 and earlier years are also available in some of these tables.

¹CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan statistical area.

²Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.



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Arkansas

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Statistics for Establishments With Payroll

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Arkansas. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 22,046 establishments in this State operating in the construction industries. These establishments accounted for \$3.8 billion in total dollar value of business done.

Most of the 22,046 construction establishments were small. Of the total, 17,601 were nonemployers, and over half of the employer establishments had less than 5 employees. The 1,731 construction establishments with 5 employees or more, while representing only 8 percent of all establishments, accounted for more than 75 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$3.4 billion in total dollar value of business done. Of this amount, \$3.3 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$820 million, leaving net value of construction work of \$2.5 billion. In addition, these establishments paid out \$1.3 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$1.4 billion. (See Introduction and appendixes for explanation of terms.)

There were 4,445 establishments with total employment averaging 34,057 during the year. Total payroll for 1992 was \$652 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 17,601 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$480 million. Most of these establishments, about 83 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

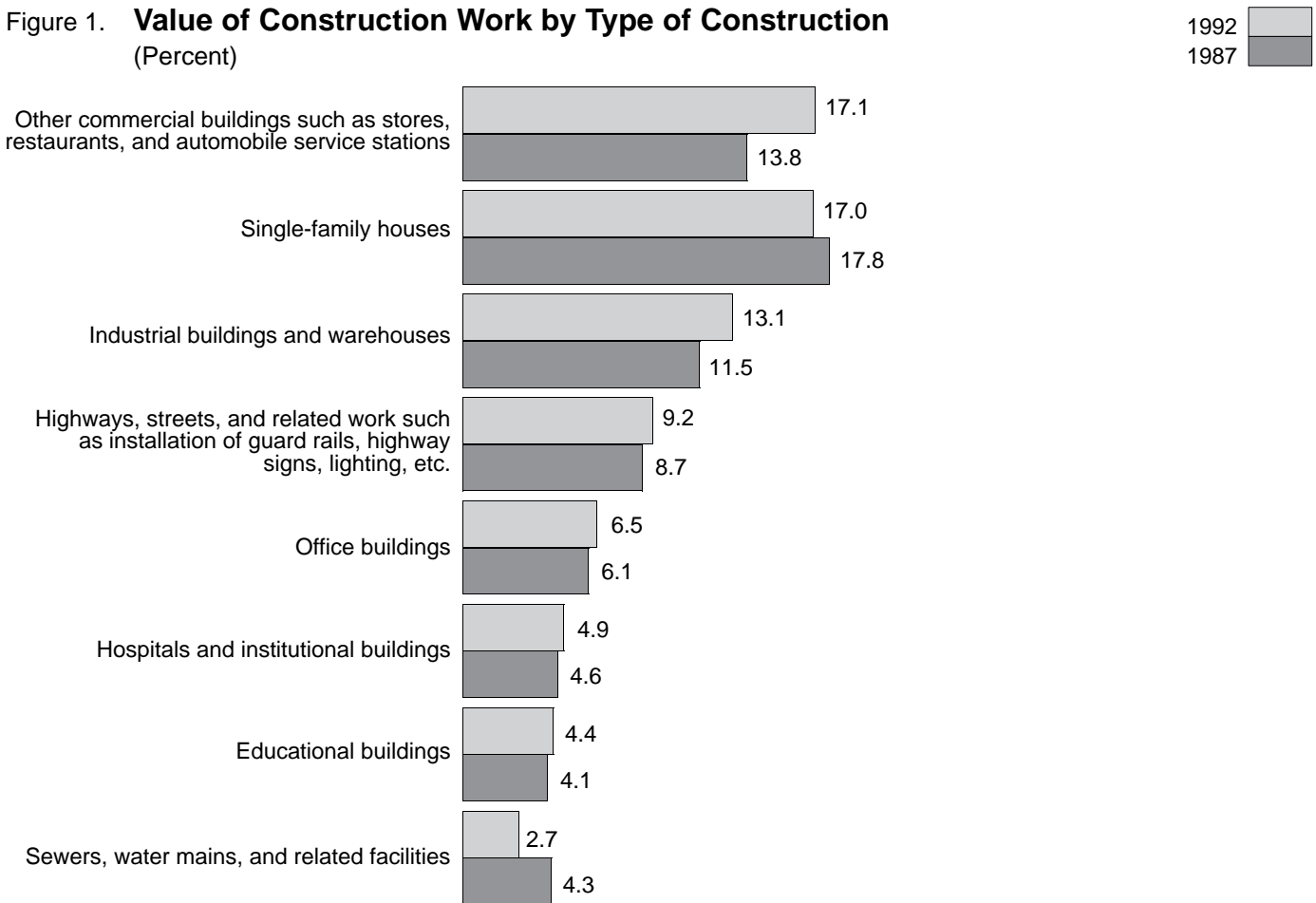


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

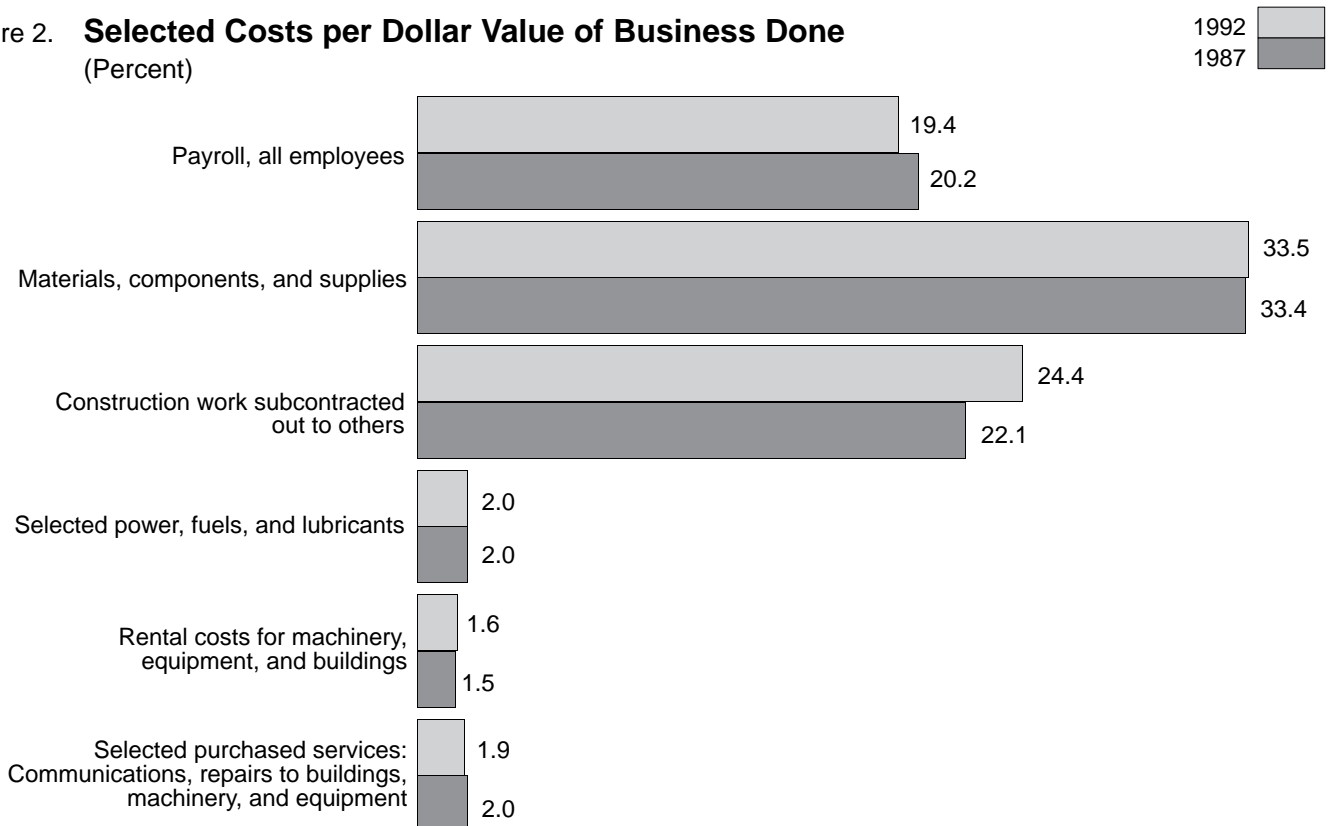


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	22 046	19 595	34 057	3 840 903	17 601	17 411	479 992	4 445	2 184	34 057	3 360 911	1	1
15	Building construction—General contractors and operative builders ----	3 815	3 028	7 753	1 582 579	2 606	2 461	192 282	1 209	567	7 753	1 390 297	3	3
16	Heavy construction other than building construction—contractors -----	932	627	6 156	673 219	457	425	14 401	475	202	6 156	658 818	3	3
17	Special trade contractors -----	17 299	15 940	20 148	1 585 106	14 538	14 525	273 309	2 761	1 415	20 148	1 311 797	2	2
1711	Plumbing, heating, and air-conditioning --	1 944	1 584	5 225	427 046	1 249	1 245	37 594	695	339	5 225	389 452	3	4
1731	Electrical work -----	1 234	926	3 546	248 323	800	790	16 903	434	136	3 546	231 420	5	4
	1987													
15, 16, 17	Construction industries² -----	23 160	19 992	30 434	3 154 264	18 987	18 829	670 736	4 173	1 163	30 434	2 483 528	2	2
15	Building construction—General contractors and operative builders ----	4 797	3 813	(D)	1 279 328	3 711	3 531	259 336	1 086	282	(D)	1 019 992	(D)	3
16	Heavy construction other than building construction—contractors -----	836	477	6 110	556 686	382	373	20 042	454	104	6 110	536 644	3	3
17	Special trade contractors -----	17 033	15 287	(D)	1 247 043	14 463	14 523	347 913	2 570	764	(D)	899 130	(D)	3
1711	Plumbing, heating, and air-conditioning --	1 946	1 499	3 763	310 393	1 312	1 319	45 333	634	180	3 763	265 060	5	5
1731	Electrical work -----	1 236	907	2 729	193 139	821	820	33 339	415	87	2 729	159 800	5	4

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹	4 445	34 057	27 101	651 800	482 166	3 302 594	2 483 084	1 350 666
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses	666	2 018	1 442	30 164	19 827	241 973	182 803	84 066
1522	Other residential buildings	34	333	192	6 356	3 518	58 054	29 554	(S)
1531	Operative builders	127	340	179	5 638	2 360	69 706	48 383	10 113
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses	59	823	660	18 110	12 147	158 411	74 611	26 686
1542	Nonresidential buildings, n.e.c.	322	4 240	3 233	88 946	59 136	843 937	395 485	201 925
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction	109	2 377	1 999	49 708	37 736	309 543	258 050	138 037
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction	19	308	255	6 141	4 499	34 353	24 482	14 260
1623	Water, sewer, and utility lines	158	1 748	1 434	35 171	27 097	124 232	110 159	73 093
1629	Heavy construction, n.e.c.	188	1 722	1 425	37 242	29 262	169 885	154 962	87 425
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning	695	5 225	4 109	107 485	82 023	384 733	349 806	191 285
1721	Painting and paper hanging	187	1 057	901	17 285	14 224	51 723	46 322	33 087
1731	Electrical work	434	3 546	2 810	71 794	55 023	229 900	224 065	125 889
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework	194	1 103	1 017	16 094	13 702	46 369	45 108	28 757
1742	Plastering, drywall, and insulation work	103	1 361	1 139	22 367	18 762	79 666	75 511	44 652
1743	Terrazzo, tile, marble, and mosaic work	34	156	112	2 257	1 626	* 12 420	10 678	4 655
175	Carpentry and floor work:								
1751	Carpentry	186	627	555	9 948	8 506	39 392	35 646	23 210
1752	Floor laying and other floor work	45	(S)	(S)	(S)	(S)	(S)	(S)	(D)
1761	Roofing, siding, and sheet metal work	237	1 558	1 182	27 518	17 962	95 089	88 984	48 473
1771	Concrete work	197	1 614	1 345	24 628	18 319	96 379	89 716	53 137
1781	Water well drilling	41	314	255	5 642	4 354	22 938	22 428	(D)
179	Miscellaneous special trade contractors:								
1791	Structural steel erection	30	397	323	7 846	5 524	30 577	29 350	19 230
1793	Glass and glazing work	25	143	95	3 440	1 760	9 707	9 612	5 736
1794	Excavation work	105	452	368	7 284	5 587	34 535	31 971	23 892
1795	Wrecking and demolition work, n.e.c.	* 6	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1796	Installing building equipment, n.e.c.	45	939	803	24 915	20 436	68 837	64 102	47 878
1799	Special trade contractors, n.e.c.	198	1 423	1 096	22 467	16 335	65 036	60 923	35 276

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
1 190 735	819 511	781 281	53 423	76 659	649 133	30 434	2 400 570	1 032 258	1	1	7	15, 16, 17
												15
102 144	59 170	7 179	(S)	1 805	20 316	1 816	164 821	56 521	9	12	27	152
20 682	28 500	39	251	656	5 408	419	54 947	23 019	10	10	10	1521
39 231	21 323	(S)	(S)	*1 272	4 115	(D)	99 616	27 320	22	21	63	1531
49 588	83 800	(D)	1 030	945	10 795	1 017	85 364	29 723	9	7	30	154
205 387	448 451	(S)	11 981	5 050	43 112	4 633	571 098	170 131	4	5	13	1541
												1542
												16
131 545	51 492	52 644	6 234	13 297	156 407	2 235	224 796	99 780	6	6	9	1611
10 557	9 871	4 263	502	1 467	10 820	356	46 105	15 845	15	13	11	162
38 538	14 073	22 901	2 597	8 080	64 706	1 777	125 741	67 844	6	7	15	1622
75 004	14 923	34 575	5 904	10 666	107 345	1 742	127 253	68 106	7	5	14	1623
												1629
												17
163 240	34 927	206 739	7 090	9 451	53 164	3 763	261 538	115 804	3	4	17	1711
13 339	5 401	23 002	640	1 061	4 914	713	35 463	24 939	11	11	31	1721
99 697	5 834	147 258	2 961	4 161	28 352	2 729	157 870	82 783	5	4	22	1731
16 421	*1 261	43 752	316	2 545	13 812	870	28 141	20 176	8	9	35	174
32 574	4 156	72 342	960	*333	5 284	784	39 940	21 866	11	14	52	1741
*6 544	(S)	4 833	79	*80	1 095	90	8 289	4 796	20	37	74	1742
												1743
12 669	*3 746	19 215	486	168	1 824	643	24 313	13 241	13	18	15	175
(D)	(S)	(S)	*182	*171	(S)	152	6 248	3 713	(S)	(S)	44	1751
40 832	6 104	31 980	1 465	813	15 715	1 604	88 889	49 455	6	6	29	1761
38 555	6 663	30 618	3 330	4 589	37 193	1 255	61 421	29 399	10	10	24	1771
12 408	510	1 033	51	677	15 785	237	16 021	6 317	2	4	27	1781
10 121	1 226	6 217	*234	*252	4 453	569	31 889	18 806	21	15	50	179
6 136	95	8 102	239	120	835	207	13 755	7 688	5	9	15	1791
8 112	2 564	*19 090	(S)	*6 497	*19 847	592	37 923	23 579	18	18	64	1793
(S)	(S)	(D)	(D)	—	—	(D)	468	287	(S)	(S)	—	1794
(D)	4 734	9 386	1 616	1 443	12 705	524	29 613	20 910	3	2	9	1795
29 432	4 114	15 370	(D)	1 059	9 067	852	41 703	24 691	10	10	34	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	4 445	4 173	3 864	5 083	1	1	3	3
Proprietors and working partners.....	2 184	1 163	1 390	3 555	3	7	6	5
All employees**	34 057	30 434	28 577	33 890	1	2	2	2
Construction workers:								
March.....	24 927	22 935	22 653	26 936	1	2	2	2
May	27 828	25 032	24 239	30 192	1	2	2	2
August	28 931	26 463	24 873	31 361	1	2	2	2
November.....	26 719	23 254	22 976	28 546	1	2	2	2
Average.....	27 101	24 421	24 067	29 362	1	2	2	2
Other employees:								
March.....	7 033	5 977	4 492	4 380	2	2	3	3
May	6 874	5 940	(NA)	(NA)	2	2	(NA)	(NA)
August	7 051	6 175	(NA)	(NA)	2	2	(NA)	(NA)
November.....	6 864	5 976	(NA)	(NA)	2	2	(NA)	(NA)
Average.....	6 955	6 017	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	651 800	501 685	416 608	313 220	1	1	2	1
Payroll, construction workers	482 166	368 756	336 627	254 419	1	1	2	2
Payroll, other employees	169 633	132 928	79 981	58 801	1	2	2	2
First-quarter payroll, all employees	140 644	119 266	95 008	65 273	1	2	2	1
Fringe benefits, all employees	135 847	87 978	73 720	48 981	2	2	2	1
Legally required expenditures.....	106 853	66 901	56 957	36 570	2	2	2	2
Voluntary expenditures.....	28 994	21 076	16 762	12 411	3	3	2	2
Dollar value of business done	3 360 911	2 483 528	1 803 023	1 522 463	1	2	2	2
Value of construction work	3 302 594	2 400 570	1 733 824	1 450 938	1	1	2	2
Value of construction work subcontracted in from others	781 281	487 762	388 933	308 353	4	5	3	3
Other business receipts	58 317	61 989	56 096	71 525	6	6	4	3
Net value of construction†	2 483 084	1 850 733	1 407 837	1 109 379	1	1	2	2
Value added††	1 350 666	1 032 258	867 075	574 898	2	2	2	2
Selected costs.....	2 010 246	1 430 301	922 844	916 457	2	2	2	2
Materials, components, and supplies	1 124 697	829 845	550 792	543 795	2	2	2	2
Construction work subcontracted out to others	819 511	549 837	325 986	341 559	2	3	3	3
Selected power, fuels, and lubricants.....	66 038	50 619	46 066	31 103	3	3	4	3
Electricity.....	11 123	7 443	6 176	3 692	3	5	7	4
Natural gas	3 584	3 077	1 674	1 932	4	9	5	6
Gasoline and diesel fuel	47 652	36 938	34 586	21 847	3	3	4	2
On highway use.....	33 219	23 770	(NA)	(NA)	3	2	(NA)	(NA)
Off highway use.....	14 433	13 167	(NA)	(NA)	7	7	(NA)	(NA)
Other, including lubricating oils and greases.....	3 679	3 159	3 629	3 632	4	7	7	6
Rental cost for machinery, equipment, and buildings	53 423	37 286	23 879	19 191	5	4	4	3
For machinery and equipment	40 737	27 979	19 860	16 350	6	5	5	3
For buildings.....	12 685	9 307	4 018	2 842	7	5	5	6
Selected purchased services	64 402	50 612	39 129	30 249	5	3	3	2
Communication services	16 631	10 517	9 116	6 509	5	6	3	3
Repairs to buildings and other structures	2 729	2 452	1 735	2 013	9	12	12	9
Repairs to machinery and equipment	45 042	37 641	28 277	21 727	6	4	3	3
Ownership of construction projects:								
Value of construction work	3 302 594	2 400 570	1 733 824	1 450 938	1	1	2	2
Government owned	744 067	574 608	362 576	261 372	5	5	6	2
Federal	207 122	214 584	(NA)	(NA)	7	7	(NA)	(NA)
State and local	536 945	360 024	(NA)	(NA)	6	7	(NA)	(NA)
Privately owned	2 558 527	1 825 961	1 371 247	1 189 566	3	3	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	599 718	379 457	3	4
Capital expenditures, other than land -----	76 659	48 238	7	5
New -----	56 337	35 070	6	6
Used -----	20 322	13 167	14	12
Retirements and disposition of depreciable assets -----	27 244	14 860	12	10
End-of-year gross book value of depreciable assets -----	649 133	412 835	3	4
Depreciation charges during year -----	71 197	52 646	4	5
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	65 728	63 251	9	6
Capital expenditures, other than land -----	4 843	4 272	21	11
New buildings and other structures -----	2 842	2 258	28	9
Used buildings and other structures -----	2 000	2 013	33	20
Retirements and disposition of depreciable assets -----	*1 809	3 036	53	14
End-of-year gross book value of depreciable assets -----	68 761	64 487	9	6
Depreciation charges during year -----	5 997	5 725	12	10
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	533 990	316 206	3	4
Capital expenditures, other than land -----	71 817	43 966	7	6
New machinery and equipment, including automobiles and trucks -----	53 495	32 811	6	6
New automobiles and trucks, intended primarily for highway use -----	18 301	13 898	9	7
Used machinery and equipment, including automobiles and trucks -----	18 321	11 154	15	14
Retirements and disposition of depreciable assets -----	25 435	11 824	12	12
End-of-year gross book value of depreciable assets -----	580 372	348 347	4	4
Depreciation charges during year -----	65 200	46 921	4	5

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	4 445	1
Value of construction work	3 302 594	1
Establishments with inventories:		
Number	1 344	4
Value of construction work	1 029 019	3
Inventories ¹ :		
End of 1992, materials and supplies	31 059	7
End of 1991, materials and supplies	31 729	6
Establishments with no inventories:		
Number	1 443	4
Value of construction work	1 590 489	2
Establishments not reporting:		
Number	1 658	3
Value of construction work	683 087	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	4 445	2 714	856	524	263	58	27	3	—	—	
All employees** -----	34 057	5 147	5 463	6 876	7 808	3 914	3 924	924	—	—	
Payroll, all employees -----	651 800	71 014	86 130	128 141	166 483	85 561	91 507	22 964	—	—	
Dollar value of business done -----	3 360 911	491 811	414 234	596 188	700 299	409 788	748 591	(D)	—	—	
Value of construction work -----	3 302 594	486 104	407 843	582 099	687 026	394 768	744 754	(D)	—	—	
Net value of construction work† -----	2 483 084	401 283	343 334	462 944	548 355	301 429	347 189	78 549	—	—	
Value added†† -----	1 350 666	194 405	176 426	269 702	284 736	190 005	186 029	49 363	—	—	
Cost of materials, components, supplies, and fuels -----	1 190 735	212 586	173 299	207 332	276 892	126 444	194 183	(D)	—	—	
Cost of construction work subcontracted out to others -----	819 511	84 821	64 509	119 154	138 671	93 339	319 016	(D)	—	—	
Rental cost for machinery, equipment, and buildings -----	53 423	6 618	5 189	10 525	9 822	6 297	14 971	(D)	—	—	
Capital expenditures, other than land -----	76 659	10 095	9 703	17 673	11 499	10 213	17 477	(D)	—	—	
End-of-year gross book value of depreciable assets -----	649 133	73 063	76 017	113 240	139 701	80 456	166 656	(D)	—	—	
1987											
All employees** -----	30 434	(S)	5 393	6 580	7 347	3 355	3 074	—	—	—	
Value of construction work -----	2 400 570	(S)	321 694	498 116	604 072	627 313	(D)	—	—	—	
Value added†† -----	1 032 258	(S)	154 448	209 366	402 404	(D)	123 528	—	—	—	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	5	7	6	4	3	(Z)	(Z)	—	—	
Net value of construction work† -----	1	7	9	6	3	3	(Z)	(Z)	—	—	
Capital expenditures, other than land -----	7	19	21	23	4	(Z)	(Z)	(D)	—	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	4 445	(S)	(S)	633	1 268	726	556	419	110	66	37
All employees** -----	34 057	(S)	(S)	1 208	3 968	3 868	5 194	7 248	3 859	3 450	4 613
Payroll, all employees -----	651 800	(S)	(S)	12 620	50 576	60 216	85 621	153 200	85 222	82 902	116 556
Dollar value of business done -----	3 360 911	(S)	(S)	46 066	210 507	251 094	396 992	646 709	386 947	451 181	954 419
Value of construction work -----	3 302 594	(S)	(S)	45 977	207 915	248 426	387 322	635 400	381 388	439 080	940 290
Net value of construction work† -----	2 483 084	(S)	(S)	42 678	189 145	223 553	328 510	522 279	303 300	329 717	528 690
Value added†† -----	1 350 666	(S)	(S)	25 191	106 582	123 663	169 181	291 133	178 271	160 645	286 592
Cost of materials, components, supplies, and fuels -----	1 190 735	(S)	(S)	17 576	85 156	102 559	168 999	242 454	130 588	181 174	256 227
Cost of construction work subcontracted out to others -----	819 511	(S)	(S)	3 299	(S)	24 872	58 813	113 121	78 088	109 363	411 600
Rental cost for machinery, equipment, and buildings -----	53 423	(S)	(S)	510	(S)	4 972	5 232	10 903	5 588	6 065	15 942
Capital expenditures, other than land -----	76 659	(S)	(S)	2 004	5 129	7 132	8 172	18 636	8 251	8 731	18 189
End-of-year gross book value of depreciable assets -----	649 133	(S)	(S)	10 608	41 911	54 282	60 307	140 014	75 677	93 491	170 040
1987											
All employees** -----	30 434	(S)	(S)	(S)	3 705	4 093	4 307	6 275	4 677	2 496	2 528
Value of construction work -----	2 400 570	(S)	(S)	(S)	165 986	234 645	305 132	508 351	421 751	693 288	(D)
Value added†† -----	1 032 258	(S)	(S)	(S)	87 327	110 892	137 082	220 588	171 692	127 836	136 115
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	12	8	9	8	5	4	2	(Z)
Net value of construction work† -----	1	(S)	(S)	9	7	8	8	6	6	6	(Z)
Capital expenditures, other than land -----	7	(S)	(S)	39	19	26	24	21	9	4	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	3 302 594	2 023 203	768 903	386 029	1	2	2	3
Building construction	2 395 582	1 525 103	617 714	252 764	2	3	3	4
Single-family houses	562 998	390 732	109 730	62 536	6	8	9	8
Single-family houses, detached	533 101	376 291	102 416	54 394	7	8	9	9
Single-family houses, attached, including townhouses and townhouse-type condominiums	29 898	(S)	7 314	8 142	18	(S)	21	16
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	78 435	57 378	10 677	10 380	9	11	19	12
Other residential buildings, including hotels, motels, and tourist cabins	47 053	32 461	10 339	4 254	14	18	6	8
Office buildings	213 096	120 051	75 989	17 056	6	5	10	8
Other commercial buildings such as stores, restaurants, and automobile service stations	564 964	344 525	183 717	36 723	3	3	4	7
Industrial buildings and warehouses	432 936	263 406	100 569	68 961	3	4	5	9
Industrial buildings	331 744	185 227	84 355	62 162	4	5	5	9
Warehouses	101 192	78 179	16 214	6 799	5	4	15	25
Religious buildings	53 478	36 630	11 853	4 995	4	4	5	23
Educational buildings	146 277	101 187	36 078	9 011	7	8	6	22
Hospitals and institutional buildings	163 205	102 918	54 445	5 843	8	11	8	8
Farm buildings, nonresidential	44 999	36 898	(D)	(D)	31	37	(D)	(D)
Amusement, social, and recreational buildings, indoors	44 253	(S)	(D)	(D)	4	(S)	(D)	(D)
Other nonresidential buildings	43 885	24 446	*9 049	10 391	20	25	45	16
Nonbuilding construction	782 554	498 100	151 189	133 265	2	3	7	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	304 956	175 632	80 533	48 791	5	7	12	6
Private driveways and parking areas	38 051	27 966	6 758	3 326	13	13	18	39
Bridges, tunnels, and elevated highways	39 866	30 367	7 516	1 983	12	15	3	27
Conservation and development construction	35 773	24 099	*6 178	*5 496	16	14	46	45
Power and communication transmission lines, towers, and related facilities	(S)	(S)	1 758	(S)	(S)	(S)	7	(S)
Sewers, water mains, and related facilities	88 826	73 708	8 141	6 977	8	8	26	8
Sewers, sewer lines, septic systems, and related facilities	34 247	27 613	5 561	1 073	13	13	32	19
Water mains and related facilities	54 579	46 095	2 580	5 904	7	7	26	8
Pipeline construction other than sewer or water lines	25 740	22 846	685	2 209	10	11	33	2
Blast furnaces, petroleum refineries, chemical complexes, etc.	47 227	23 136	7 148	16 943	1	1	4	2
Other nonbuilding construction	156 319	90 625	32 471	33 223	5	7	7	7
Construction work, n.s.k.	124 459	(NA)	(NA)	(NA)	9	(NA)	(NA)	(NA)
1987								
Value of construction work	2 400 570	1 497 452	457 701	283 884	1	2	4	4
Building construction	1 629 437	1 121 944	326 578	180 913	2	3	4	7
Single-family houses	427 564	298 277	78 788	50 498	5	7	13	9
Single-family houses, detached	402 723	282 065	74 537	46 119	6	7	13	9
Single-family houses, attached, including townhouses and townhouse-type condominiums	24 840	16 212	4 250	4 378	22	31	36	24
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	57 053	46 097	3 572	*7 383	13	12	27	53
Other residential buildings, including hotels, motels, and tourist cabins	62 232	48 884	8 377	4 970	5	5	22	17
Office buildings	146 802	85 520	45 378	15 903	4	5	6	6
Other commercial buildings such as stores, restaurants, and automobile service stations	331 147	246 344	53 633	31 168	5	6	11	16
Industrial buildings and warehouses	276 488	160 669	71 764	44 055	4	6	4	5
Industrial buildings	238 362	134 783	65 478	38 100	4	6	5	5
Warehouses	38 126	25 885	6 286	5 954	9	12	15	20
Religious buildings	39 366	8 900	3 644	3 644	5	4	13	11
Educational buildings	97 718	73 077	17 478	7 161	10	10	17	33
Hospitals and institutional buildings	111 087	81 274	21 988	7 824	5	6	6	23
Farm buildings, nonresidential	38 667	32 558	4 403	1 704	13	14	11	21
Other nonresidential buildings	41 313	22 423	12 297	*6 603	23	31	36	57
Nonbuilding construction	609 602	375 507	131 123	102 971	3	4	6	5
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	209 475	113 797	62 250	33 427	4	8	7	8
Conservation and development construction	24 013	9 904	(S)	7 971	24	20	(S)	11
Power and communication transmission lines, towers, and related facilities	33 610	26 918	2 347	4 345	9	8	22	11
Sewers, water mains, and related facilities	102 544	79 333	14 579	8 631	12	12	31	17
Sewers, sewer lines, septic systems, and related facilities	40 399	31 704	6 009	2 684	16	17	28	15
Water mains and related facilities	62 144	47 628	*8 569	5 946	14	14	46	23
Other nonbuilding construction	239 960	145 555	45 809	48 597	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	161 530	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. **Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	4 445	27 101	24 927	27 828	28 931	26 719	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	666	1 442	1 291	1 448	1 493	1 538	6	9	10	10	9	11
1522	Other residential buildings -----	34	192	174	199	200	194	25	13	17	13	10	11
1531	Operative builders -----	127	179	181	195	185	154	18	29	28	29	28	30
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	59	660	640	680	647	672	19	9	7	8	8	12
1542	Nonresidential buildings, n.e.c. ---	322	3 233	3 025	3 280	3 671	2 955	9	5	5	4	5	5
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	109	1 999	1 643	2 104	2 289	1 958	13	5	6	5	6	5
162	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction -----	19	255	202	252	283	283	24	15	17	16	15	14
1623	Water, sewer, and utility lines -----	158	1 434	1 285	1 378	1 571	1 502	12	6	7	6	6	6
1629	Heavy construction, n.e.c. -----	188	1 425	1 284	1 366	1 557	1 494	13	7	6	7	7	9
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	695	4 109	3 802	4 358	4 287	3 989	3	4	4	4	4	4
1721	Painting and paper hanging -----	187	901	859	871	1 012	863	9	12	15	12	12	11
1731	Electrical work -----	434	2 810	2 745	2 807	2 965	2 724	5	4	5	5	5	4
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	194	1 017	962	1 224	991	890	6	9	9	9	10	8
1742	Plastering, drywall, and insulation work -----	103	1 139	978	1 161	1 246	1 171	13	10	10	10	12	11
1743	Terrazzo, tile, marble, and mosaic work -----	34	112	116	113	105	114	26	19	19	19	21	19
175	Carpentry and floor work:												
1751	Carpentry -----	186	555	537	566	585	533	11	12	12	11	12	12
1752	Floor laying and other floor work --	45	(S)	(S)	(S)	(S)	(S)	15	(S)	(S)	(S)	(S)	(S)
1761	Roofing, siding, and sheet metal work -----	237	1 182	1 179	1 202	1 169	1 180	9	6	7	7	6	6
1771	Concrete work -----	197	1 345	1 198	1 365	1 433	1 383	8	10	11	10	10	11
1781	Water well drilling -----	41	255	227	267	281	246	11	3	3	3	3	3
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	30	323	284	344	359	304	21	22	20	20	24	23
1793	Glass and glazing work -----	25	95	99	97	96	89	(Z)	2	5	2	6	7
1794	Excavation work -----	105	368	303	413	410	345	18	18	19	18	19	21
1795	Wrecking and demolition work -----	*6	(S)	(S)	(S)	*20	*11	67	(S)	(S)	(S)	74	67
1796	Installing building equipment, n.e.c. -----	45	803	721	807	742	944	18	3	4	3	3	3
1799	Special trade contractors, n.e.c. ---	198	1 096	1 037	1 138	1 164	1 047	12	9	10	9	10	10

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	7.7	19.1	121.9	.197	.361	.248	.237	.016
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.0	14.9	167.8	.125	.422	.245	.030	(S)
1522	Other residential buildings -----	9.7	19.1	302.4	.109	.356	.491	.001	.004
1531	Operative builders -----	2.7	16.6	389.4	.081	.563	.306	(S)	*.014
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	13.9	22.0	240.0	.114	.313	.529	(D)	.007
1542	Nonresidential buildings, n.e.c. -----	13.2	21.0	261.0	.105	.243	.531	(S)	.014
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	21.8	20.9	154.8	.161	.425	.166	.170	.020
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	16.3	19.9	134.7	.179	.307	.287	.124	.015
1623	Water, sewer, and utility lines -----	11.0	20.1	86.6	.283	.310	.113	.184	.021
1629	Heavy construction, n.e.c. -----	9.1	21.6	119.2	.219	.441	.088	.204	.035
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	7.5	20.6	93.6	.279	.424	.091	.537	.018
1721	Painting and paper hanging -----	5.7	16.4	57.4	.334	.258	.104	.445	.012
1731	Electrical work -----	8.2	20.2	81.8	.312	.434	.025	.641	.013
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.7	14.6	45.6	.347	.354	*.027	.944	.007
1742	Plastering, drywall, and insulation work -----	13.3	16.4	69.9	.281	.409	.052	.908	.012
1743	Terrazzo, tile, marble, and mosaic work -----	4.6	14.5	110.9	.182	.527	*.140	*.389	*.006
175	Carpentry and floor work:								
1751	Carpentry -----	3.4	15.9	71.0	.253	.322	.095	.488	.012
1752	Floor laying and other floor work -----	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(S)
1761	Roofing, siding, and sheet metal work -----	6.6	17.7	80.4	.289	.429	.064	.336	.015
1771	Concrete work -----	8.2	15.3	71.7	.256	.400	.069	.318	.035
1781	Water well drilling -----	7.7	18.0	90.0	.246	.541	.022	.045	.002
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	13.2	19.8	94.7	.257	.331	.040	.203	*.008
1793	Glass and glazing work -----	5.8	24.1	102.2	.354	.632	.010	.835	.025
1794	Excavation work -----	4.3	16.1	93.8	.211	.235	.074	*.553	*.051
1795	Wrecking and demolition work -----	6.9	16.6	192.7	.146	.346	.207	(D)	(D)
1796	Installing building equipment, n.e.c. -----	20.9	26.5	85.7	.362	(D)	.069	.136	.023
1799	Special trade contractors, n.e.c. -----	7.2	15.8	59.3	.345	.453	.063	.236	(D)

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	MEMPHIS, TN-AR-MS MSA											
15,16,17	Construction industries	1 747	19 165	443 617	2 079 965	1 568 485	853 852	740 772	511 480	32 711	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	206	1 023	19 260	181 144	113 776	34 378	(S)	67 368	(S)	12	13
1522	Other residential buildings	30	291	6 235	44 648	26 674	15 870	10 904	17 974	704	9	12
1531	Operative builders	97	385	12 641	206 736	133 727	52 329	82 269	73 009	299	12	19
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	24	701	19 046	111 784	67 691	38 064	30 000	44 093	2 514	8	3
1542	Nonresidential buildings, n.e.c.	115	1 715	41 957	308 873	123 688	60 477	64 541	185 185	1 793	6	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	849	21 705	104 939	84 472	42 584	43 254	20 467	3 918	1	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	5	124	3 010	14 101	(D)	4 580	5 623	(D)	(D)	25	(D)
1623	Water, sewer, and utility lines	24	811	16 646	69 103	61 807	40 509	21 487	7 296	1 621	2	1
1629	Heavy construction, n.e.c.	30	713	20 650	103 084	87 938	57 587	30 358	15 146	7 696	4	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	288	3 404	76 522	263 034	242 959	130 716	115 118	20 075	3 656	3	3
1721	Painting and paper hanging	93	724	13 226	33 597	30 469	20 744	9 739	3 127	335	8	5
1731	Electrical work	151	2 482	66 922	204 828	198 080	119 421	86 014	6 748	1 906	4	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	684	13 941	39 318	36 399	18 952	17 524	(S)	464	9	7
1742	Plastering, drywall, and insulation work	(S)	806	18 178	56 789	52 582	33 450	21 508	4 207	328	7	7
1743	Terrazzo, tile, marble, and mosaic work	30	186	3 641	10 544	9 947	5 676	5 172	(S)	(S)	19	23
175	Carpentry and floor work:											
1751	Carpentry	83	310	4 842	18 343	17 224	9 523	7 711	(S)	*80	20	20
1752	Floor laying and other floor work	(S)	166	2 791	10 938	10 005	5 063	5 210	933	(S)	7	9
1761	Roofing, siding, and sheet metal work	96	1 239	25 258	84 988	74 191	47 645	29 704	10 797	816	8	10
1771	Concrete work	95	893	16 788	78 061	65 825	39 678	26 291	12 236	1 822	8	5
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	109	2 744	4 417	4 348	3 139	(D)	*69	(D)	10	23
1793	Glass and glazing work	18	144	3 225	7 771	7 706	4 460	4 883	65	145	14	15
1794	Excavation work	20	182	3 469	12 325	11 755	8 802	3 334	570	1 417	23	18
1795	Wrecking and demolition work	5	(D)	(D)	(D)	(D)	(D)	(D)	128	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	18	495	18 004	64 643	(D)	32 072	23 485	(D)	2 019	(Z)	(D)
1799	Special trade contractors, n.e.c.	112	653	11 340	40 290	36 854	25 146	12 594	3 436	(S)	15	17

AR-14 ARKANSAS

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Contents

Louisiana

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Louisiana. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 25,532 establishments in this State operating in the construction industries. These establishments accounted for \$8.2 billion in total dollar value of business done.

Most of the 25,532 construction establishments were small. Of the total, 19,128 were nonemployers, and over half of the employer establishments had less than 5 employees. The 2,975 construction establishments with 5 employees or more, while representing only 12 percent of all establishments, accounted for more than 86 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$7.7 billion in total dollar value of business done. Of this amount, \$7.5 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.2 billion, leaving net value of construction work of \$6.3 billion. In addition, these establishments paid out \$3.0 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$3.8 billion. (See Introduction and appendixes for explanation of terms.)

There were 6,404 establishments with total employment averaging 91,852 during the year. Total payroll for 1992 was \$2.1 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 19,128 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$524 million. Most of these establishments, about 84 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

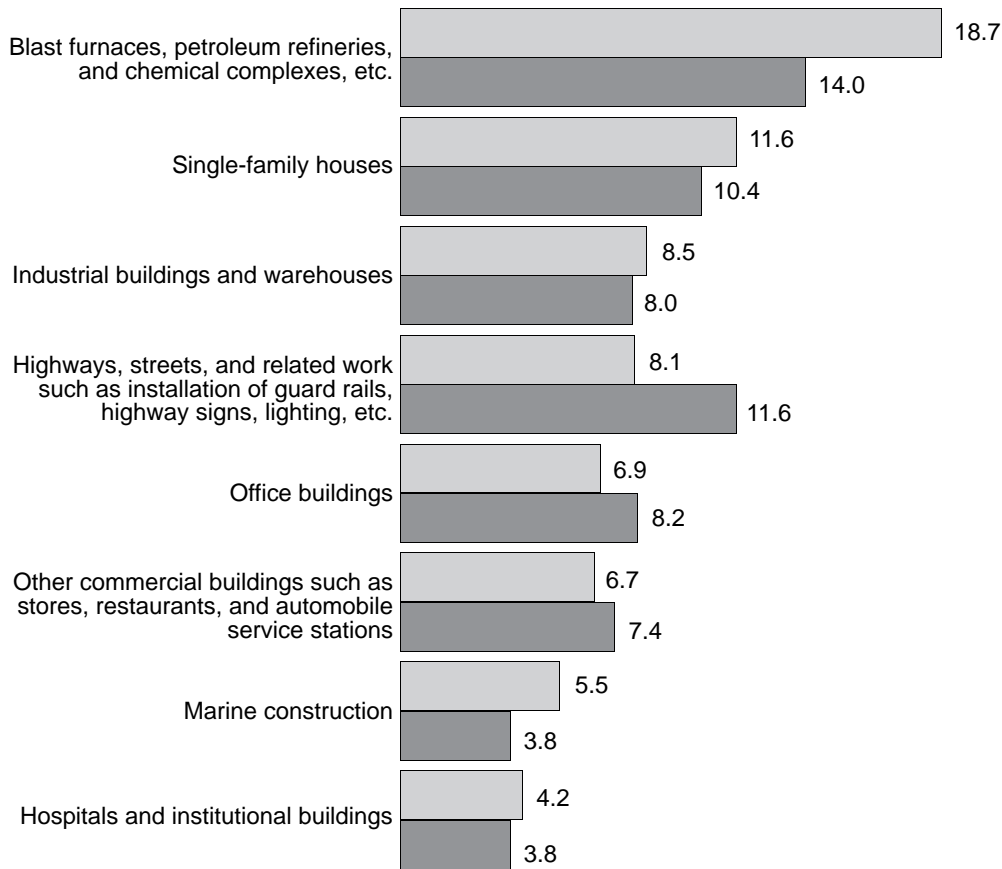




Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

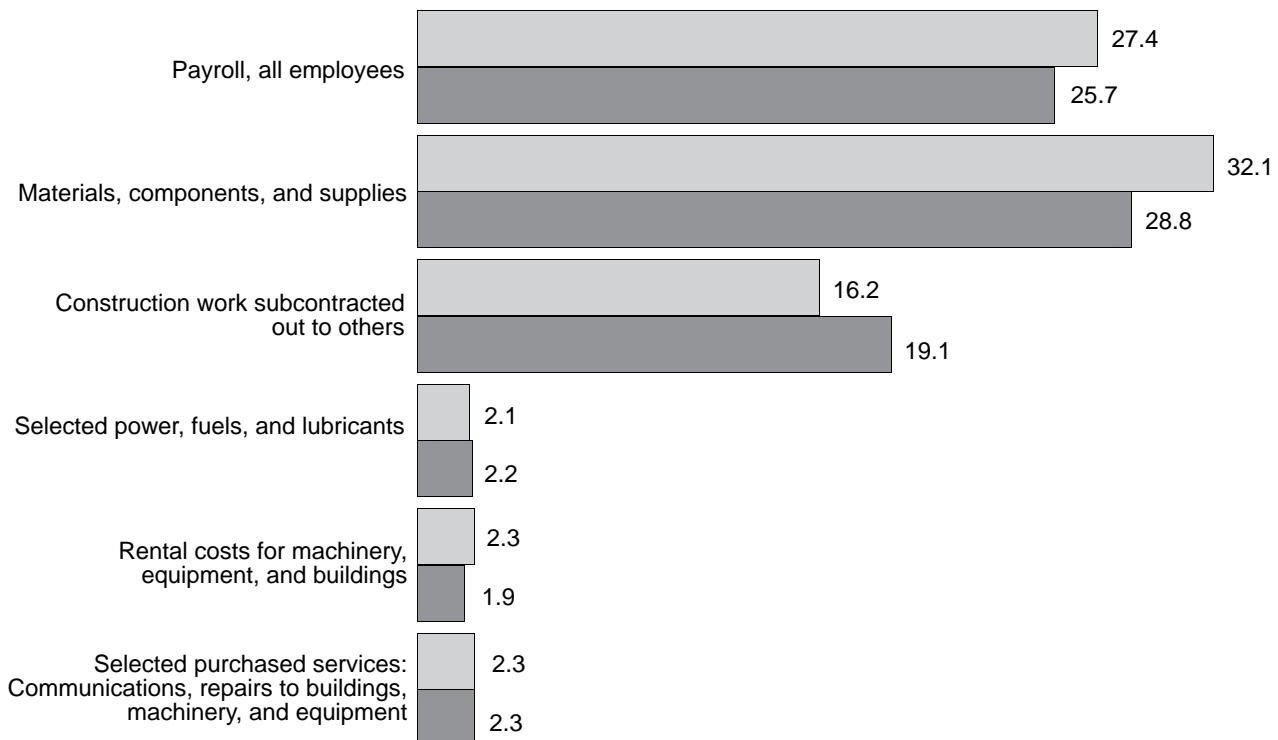


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	25 532	20 306	91 852	8 199 779	19 128	18 299	523 840	6 404	2 007	91 852	7 675 939	1	1
15	Building construction—General contractors and operative builders ----	3 975	2 445	12 063	1 824 233	2 454	2 016	174 836	1 521	429	12 063	1 649 397	3	3
16	Heavy construction other than building construction—contractors -----	1 441	793	38 230	3 278 322	657	616	17 789	784	(S)	38 230	3 260 533	1	1
17	Special trade contractors -----	20 116	17 069	41 559	3 097 225	16 017	15 667	331 215	4 099	1 402	41 559	2 766 010	1	1
1711	Plumbing, heating, and air-conditioning --	2 446	1 693	8 068	727 257	1 440	1 372	50 480	1 006	321	8 068	676 777	2	2
1731	Electrical work -----	2 017	1 409	9 098	646 529	1 280	1 215	28 740	737	(S)	9 098	617 789	3	2
	1987													
15, 16, 17	Construction industries² -----	26 981	20 851	76 720	6 523 189	20 642	19 652	777 493	6 339	1 199	76 720	5 745 696	1	1
15	Building construction—General contractors and operative builders ----	5 352	3 412	12 422	1 799 940	3 736	3 174	281 201	1 616	238	12 422	1 518 739	3	3
16	Heavy construction other than building construction—contractors -----	1 300	652	28 816	2 160 126	593	563	42 572	707	89	28 816	2 117 554	1	1
17	Special trade contractors -----	19 746	16 356	35 054	2 427 837	15 840	15 503	364 813	3 906	853	35 054	2 063 024	2	2
1711	Plumbing, heating, and air-conditioning --	2 496	1 717	6 487	517 335	1 577	1 513	51 452	919	204	6 487	465 883	4	2
1731	Electrical work -----	2 118	1 458	7 874	533 336	1 352	1 280	36 255	766	178	7 874	497 081	2	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
		A	B	C	D	E	F	G	H
15, 16, 17	Construction industries¹ -----	6 404	91 852	75 352	2 106 170	1 608 648	7 544 546	6 298 427	3 804 749
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	807	3 448	2 497	50 579	33 300	372 434	257 141	116 124
1522	Other residential buildings -----	72	458	332	9 387	5 869	39 988	29 491	18 512
1531	Operative builders -----	127	524	174	9 577	2 369	156 026	114 325	62 893
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	147	2 335	1 840	47 833	33 090	196 291	138 698	82 267
1542	Nonresidential buildings, n.e.c. -----	368	5 298	4 101	108 173	73 004	870 704	432 757	213 929
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction -----	132	6 643	5 619	128 191	96 432	671 009	567 993	247 199
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	12	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	203	4 521	3 816	106 986	81 452	426 381	378 073	250 499
1629	Heavy construction, n.e.c. -----	437	25 472	22 264	699 356	575 392	1 895 756	1 660 756	1 175 458
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	1 006	8 068	6 006	183 734	128 853	671 604	592 082	310 207
1721	Painting and paper hanging -----	291	3 561	3 099	69 397	55 647	180 269	167 479	123 719
1731	Electrical work -----	737	9 098	7 220	217 376	165 635	609 213	592 681	356 534
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	160	(D)	1 333	32 264	(D)	(D)	(D)	56 211
1742	Plastering, drywall, and insulation work -----	166	3 143	2 700	82 793	54 568	189 840	177 356	107 750
1743	Terrazzo, tile, marble, and mosaic work -----	71	481	373	7 967	5 855	25 375	23 962	12 751
175	Carpentry and floor work:								
1751	Carpentry -----	275	1 224	919	21 097	14 083	78 307	67 091	37 173
1752	Floor laying and other floor work -----	102	503	374	8 200	5 985	39 962	36 463	18 384
1761	Roofing, siding, and sheet metal work -----	374	2 907	2 198	50 635	32 646	185 932	173 689	103 889
1771	Concrete work -----	133	972	785	13 175	10 283	59 287	54 232	30 774
1781	Water well drilling -----	31	111	96	1 493	1 224	6 689	6 653	3 704
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	77	875	695	19 509	14 495	66 947	63 373	46 331
1793	Glass and glazing work -----	52	394	264	6 928	4 351	22 783	22 427	11 440
1794	Excavation work -----	81	566	464	8 870	7 182	34 811	31 978	21 621
1795	Wrecking and demolition work -----	13	(D)	(D)	(D)	2 381	13 483	13 010	(D)
1796	Installing building equipment, n.e.c. -----	59	1 276	930	34 606	25 212	88 272	81 456	59 139
1799	Special trade contractors, n.e.c. -----	471	6 641	5 610	138 101	112 051	348 616	327 768	231 137

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
2 625 071	1 246 119	1 607 322	175 553	135 194	1 502 724	76 720	5 598 712	2 826 778	1	1	5	15, 16, 17
												15
143 325	115 293	15 055	4 056	*6 463	30 252	2 768	216 736	90 930	8	9	44	152
11 250	10 496	(S)	718	230	3 713	658	77 240	22 880	18	12	24	1521
52 614	41 701	*1 144	358	546	2 958	615	115 850	22 535	17	19	12	1531
57 555	57 593	16 387	4 149	1 744	21 917	1 898	155 487	73 682	6	6	17	154
227 897	437 948	20 268	5 193	3 498	45 805	6 483	910 398	224 511	6	7	11	1542
												16
336 053	103 016	89 397	16 685	31 565	350 606	7 051	737 252	313 860	3	3	8	1611
(D)	5 137	(D)	4 714	3 485	59 300	702	64 330	25 513	(D)	(D)	21	162
128 789	48 308	26 817	18 649	13 119	105 419	4 035	273 229	166 885	5	4	12	1622
530 431	235 000	177 358	76 593	37 750	581 587	17 028	1 009 234	663 379	1	1	12	1623
												17
287 048	79 522	324 388	10 650	6 321	62 192	6 487	462 665	219 696	2	2	13	1711
44 760	12 791	66 262	5 058	4 452	20 628	3 050	128 311	90 509	4	4	8	1721
244 723	16 532	344 198	6 994	6 124	52 876	7 874	493 263	307 090	3	2	9	1731
(D)	(S)	43 293	1 634	931	14 216	1 995	93 980	56 548	(D)	(D)	32	174
74 313	12 484	90 442	1 491	1 769	15 222	2 690	136 240	94 188	3	3	16	1742
11 892	*1 413	15 591	165	660	3 661	272	13 001	7 609	19	20	39	1743
31 599	*11 217	40 268	532	(S)	(S)	877	58 373	32 420	10	12	(S)	175
19 190	3 499	22 629	573	237	2 525	426	25 769	15 810	14	13	33	1751
73 250	12 244	73 247	2 290	2 629	28 562	3 043	156 060	95 148	4	4	20	1761
23 552	5 055	24 281	1 236	1 652	*10 954	930	50 788	27 000	9	13	35	1771
2 994	36	257	27	123	2 167	220	12 837	7 659	10	9	21	1781
19 596	3 574	36 305	1 551	1 733	13 241	1 134	60 587	38 833	10	15	11	179
13 893	*356	13 283	238	*120	1 509	565	38 815	20 337	13	11	44	1791
11 156	2 833	19 302	1 921	*937	6 776	(S)	(S)	(S)	18	15	49	1793
(D)	*473	(D)	313	*297	4 016	134	8 205	6 959	(D)	(D)	16	1794
27 208	6 817	17 041	1 747	*986	11 768	1 068	68 544	52 749	4	7	40	1795
110 759	20 848	98 886	8 020	6 147	44 924	3 746	177 084	119 860	4	4	11	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	6 404	6 339	8 221	7 509	1	1	2	3
Proprietors and working partners.....	2 007	1 199	2 227	3 853	4	7	4	5
All employees**	91 852	76 720	119 557	107 326	1	1	1	1
Construction workers:								
March.....	73 498	61 939	100 755	89 042	1	1	1	1
May	76 456	63 907	101 265	95 246	1	1	1	1
August	76 895	63 829	100 165	96 756	1	1	1	1
November	74 558	61 616	97 772	94 440	1	1	1	1
Average	75 352	62 823	100 690	94 265	1	1	1	1
Other employees:								
March.....	16 715	14 306	18 614	12 505	1	2	1	1
May	16 421	13 868	(NA)	(NA)	1	2	(NA)	(NA)
August	16 439	13 852	(NA)	(NA)	1	2	(NA)	(NA)
November	16 424	13 567	(NA)	(NA)	1	2	(NA)	(NA)
Average	16 500	13 898	(NA)	(NA)	1	2	(NA)	(NA)
Payroll, all employees	2 106 170	1 476 504	2 241 452	1 316 983	(Z)	1	(Z)	1
Payroll, construction workers	1 608 648	1 126 622	1 768 059	1 098 375	(Z)	1	(Z)	1
Payroll, other employees	497 522	349 881	473 393	218 608	1	1	1	1
First-quarter payroll, all employees	496 362	349 375	542 256	296 056	1	1	1	1
Fringe benefits, all employees	476 865	297 041	410 001	230 460	1	1	1	4
Legally required expenditures	356 814	232 133	307 663	150 020	1	1	1	3
Voluntary expenditures	120 051	64 908	102 338	80 440	1	1	1	5
Dollar value of business done	7 675 939	5 745 696	8 039 258	4 579 183	1	1	1	1
Value of construction work	7 544 546	5 598 712	7 809 574	4 431 332	1	1	1	1
Value of construction work subcontracted in from others	1 607 322	1 087 755	1 448 912	863 245	2	2	1	1
Other business receipts	131 394	106 564	183 731	147 852	4	5	2	3
Net value of construction†	6 298 427	4 500 503	6 456 118	3 672 235	1	1	(Z)	1
Value added††	3 804 749	2 826 778	4 133 448	2 292 002	1	1	1	1
Selected costs	3 871 191	2 878 498	3 859 858	2 239 410	1	1	1	1
Materials, components, and supplies	2 467 710	1 654 639	2 314 062	1 395 099	1	1	1	1
Construction work subcontracted out to others	1 246 119	1 098 208	1 353 456	759 097	2	2	1	2
Selected power, fuels, and lubricants	157 361	125 650	192 339	85 215	2	1	1	1
Electricity.....	20 445	17 568	37 314	8 360	3	2	1	3
Natural gas	4 959	4 305	6 248	4 064	3	4	4	3
Gasoline and diesel fuel	120 435	95 646	140 461	61 320	2	1	1	1
On highway use	66 318	56 523	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use	54 118	39 123	(NA)	(NA)	2	1	(NA)	(NA)
Other, including lubricating oils and greases.....	11 521	8 129	8 316	11 476	4	3	2	2
Rental cost for machinery, equipment, and buildings	175 553	108 462	158 238	83 666	2	2	1	1
For machinery and equipment	148 888	81 498	136 202	76 884	3	3	1	1
For buildings.....	26 665	26 963	22 035	6 782	3	3	2	2
Selected purchased services	175 431	130 664	162 848	102 592	2	1	1	1
Communication services	39 165	26 641	30 557	16 506	2	3	2	1
Repairs to buildings and other structures	6 598	6 128	8 110	4 248	4	6	3	3
Repairs to machinery and equipment	129 668	97 895	124 180	81 838	2	2	1	1
Ownership of construction projects:								
Value of construction work	7 544 546	5 598 712	7 809 574	4 431 332	1	1	1	1
Government owned	2 050 104	1 680 707	1 302 272	1 017 223	3	2	2	1
Federal	838 068	424 414	(NA)	(NA)	7	2	(NA)	(NA)
State and local	1 212 036	1 256 293	(NA)	(NA)	3	3	(NA)	(NA)
Privately owned	5 494 442	3 918 004	6 507 302	3 414 109	2	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 485 483	1 227 500	2	2
Capital expenditures, other than land -----	135 194	81 797	5	3
New -----	109 350	59 735	5	4
Used -----	25 845	22 062	9	5
Retirements and disposition of depreciable assets -----	117 954	87 469	2	3
End-of-year gross book value of depreciable assets -----	1 502 724	1 221 879	2	2
Depreciation charges during year -----	139 170	116 241	3	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	120 338	148 857	4	6
Capital expenditures, other than land -----	10 037	11 524	7	13
New buildings and other structures -----	5 777	8 412	11	17
Used buildings and other structures -----	(S)	3 111	(S)	20
Retirements and disposition of depreciable assets -----	2 208	3 668	5	8
End-of-year gross book value of depreciable assets -----	128 168	156 712	4	6
Depreciation charges during year -----	11 294	12 676	6	7
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 365 144	1 078 693	2	1
Capital expenditures, other than land -----	125 157	70 273	5	3
New machinery and equipment, including automobiles and trucks -----	103 572	51 323	5	4
New automobiles and trucks, intended primarily for highway use -----	25 585	20 265	4	5
Used machinery and equipment, including automobiles and trucks -----	21 585	18 950	11	4
Retirements and disposition of depreciable assets -----	115 746	83 800	2	3
End-of-year gross book value of depreciable assets -----	1 374 556	1 065 166	2	1
Depreciation charges during year -----	127 876	103 564	3	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	6 404	1
Value of construction work	7 544 546	1
Establishments with inventories:		
Number	1 738	3
Value of construction work	2 175 076	1
Inventories ¹ :		
End of 1992, materials and supplies	66 740	7
End of 1991, materials and supplies	65 363	10
Establishments with no inventories:		
Number	2 178	3
Value of construction work	3 551 120	1
Establishments not reporting:		
Number	2 489	3
Value of construction work	1 818 350	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	6 404	3 428	1 309	936	464	143	83	28	6	6
All employees** -----	91 852	6 998	8 514	12 023	14 197	9 769	12 295	9 581	3 874	14 602
Payroll, all employees -----	2 106 170	99 661	142 232	235 369	315 699	219 530	302 681	272 356	118 557	400 085
Dollar value of business done -----	7 675 939	609 652	670 011	1 017 547	1 261 720	908 954	1 222 348	704 394	347 667	933 648
Value of construction work -----	7 544 546	603 040	661 395	995 393	1 236 661	895 502	1 197 378	692 790	333 102	929 285
Net value of construction work† -----	6 298 427	487 001	559 996	834 066	1 009 536	672 087	950 651	615 835	319 766	849 488
Value added†† -----	3 804 749	261 623	298 682	483 304	632 342	377 430	554 714	386 195	237 872	572 587
Cost of materials, components, supplies, and fuels -----	2 625 071	231 991	269 929	372 916	402 252	308 109	420 907	241 244	96 459	281 264
Cost of construction work subcontracted out to others --	1 246 119	116 038	101 399	161 327	227 126	223 414	246 727	76 955	13 336	79 797
Rental cost for machinery, equipment, and buildings ----	175 553	10 020	9 782	14 903	29 747	24 060	26 280	42 252	(D)	18 509
Capital expenditures, other than land -----	135 194	6 323	(S)	17 683	25 530	22 723	33 428	12 016	(D)	8 913
End-of-year gross book value of depreciable assets ----	1 502 724	70 282	87 828	148 073	208 395	200 516	287 647	69 641	430 341	(D)
1987										
All employees** -----	76 720	(S)	8 303	11 146	13 450	9 721	9 673	6 644	3 830	6 863
Value of construction work -----	5 598 712	(S)	485 326	721 718	1 043 942	840 141	850 178	458 085	638 410	(D)
Value added†† -----	2 826 778	(S)	241 087	363 672	482 301	380 729	392 041	325 546	193 156	201 866
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	5	6	6	3	1	(Z)	(Z)	(Z)	(Z)
Net value of construction work† -----	1	6	7	6	2	1	(Z)	(Z)	(Z)	(Z)
Capital expenditures, other than land -----	5	16	(S)	20	1	(Z)	(Z)	(Z)	(D)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	6 404	(S)	(S)	(S)	1 781	999	940	698	233	134	120
All employees** -----	91 852	(S)	(S)	(S)	6 400	5 842	9 253	12 521	9 715	7 918	38 062
Payroll, all employees -----	2 106 170	(S)	(S)	(S)	79 176	89 980	166 631	266 205	217 052	200 555	1 065 851
Dollar value of business done -----	7 675 939	(S)	(S)	(S)	293 039	348 429	661 179	1 071 302	816 494	926 003	3 488 148
Value of construction work -----	7 544 546	(S)	(S)	(S)	289 368	344 091	645 369	1 052 269	797 394	915 801	3 429 744
Net value of construction work† -----	6 298 427	(S)	(S)	(S)	266 430	297 410	565 191	892 542	664 201	714 921	2 833 230
Value added†† -----	3 804 749	(S)	(S)	(S)	159 237	171 288	333 573	520 289	407 906	417 970	1 758 167
Cost of materials, components, supplies, and fuels -----	2 625 071	(S)	(S)	(S)	110 864	130 460	247 427	391 286	275 395	307 153	1 133 467
Cost of construction work subcontracted out to others -----	1 246 119	(S)	(S)	(S)	(S)	46 681	80 179	159 727	133 193	200 881	596 514
Rental cost for machinery, equipment, and buildings -----	175 553	(S)	(S)	(S)	5 922	7 167	10 391	17 487	17 143	19 038	97 498
Capital expenditures, other than land -----	135 194	(S)	(S)	(S)	3 848	(S)	10 238	22 255	18 501	17 012	58 036
End-of-year gross book value of depreciable assets -----	1 502 724	(S)	(S)	(S)	48 083	39 794	107 367	172 192	122 607	118 889	880 590
1987											
All employees** -----	76 720	(S)	(S)	(S)	(S)	7 209	8 698	11 612	7 989	7 382	24 607
Value of construction work -----	5 598 712	(S)	(S)	(S)	(S)	343 165	538 072	875 097	585 954	707 939	2 191 019
Value added†† -----	2 826 778	(S)	(S)	(S)	(S)	187 839	268 666	444 305	310 583	308 497	1 111 060
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	(S)	7	8	6	4	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	(S)	6	7	6	5	4	4	(Z)
Capital expenditures, other than land -----	5	(S)	(S)	(S)	18	(S)	15	15	2	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	7 544 546	4 166 118	1 513 403	1 650 298	1	1	2	1
Building construction	3 386 931	1 909 664	892 229	585 039	2	3	2	3
Single-family houses	878 123	546 134	175 184	156 805	5	7	7	7
Single-family houses, detached	796 946	507 183	159 790	129 973	5	7	7	8
Single-family houses, attached, including townhouses and townhouse-type condominiums	81 176	38 950	15 394	26 832	16	31	17	10
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	94 543	44 852	27 508	22 183	10	16	13	14
Other residential buildings, including hotels, motels, and tourist cabins	39 559	15 674	11 734	12 151	6	9	11	10
Office buildings	518 235	293 709	151 396	73 129	5	9	6	4
Other commercial buildings such as stores, restaurants, and automobile service stations	507 181	272 577	141 649	92 955	5	7	6	7
Industrial buildings and warehouses	638 478	335 357	144 058	159 063	2	3	5	3
Industrial buildings	549 463	273 692	125 500	150 271	2	3	5	3
Warehouses	89 015	61 665	18 558	8 792	7	9	15	7
Religious buildings	82 603	49 393	22 224	10 986	7	9	13	9
Educational buildings	246 829	143 192	82 205	21 432	5	7	6	8
Hospitals and institutional buildings	315 774	174 807	110 379	30 588	2	3	4	7
Other nonresidential buildings	65 606	33 969	(S)	5 745	9	8	(S)	10
Nonbuilding construction	3 942 888	2 256 454	621 175	1 065 259	1	1	2	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	611 516	353 503	179 868	78 146	3	4	3	10
Bridges, tunnels, and elevated highways	223 053	191 822	(D)	(D)	1	1	(D)	(D)
Marine construction	414 587	301 719	43 419	69 449	1	1	1	2
Conservation and development construction	141 606	86 800	34 472	20 335	11	10	30	14
Power and communication transmission lines, towers, and related facilities	105 957	71 567	17 603	16 787	6	6	13	8
Sewers, water mains, and related facilities	191 710	136 143	24 230	31 337	8	10	13	10
Sewers, sewer lines, septic systems, and related facilities	115 584	85 253	11 160	19 171	8	9	15	16
Water mains and related facilities	76 126	50 890	13 070	12 166	13	17	20	9
Pipeline construction other than sewer or water lines	269 017	160 588	40 026	68 403	3	3	2	5
Blast furnaces, petroleum refineries, chemical complexes, etc.	1 409 777	605 732	146 441	657 604	(Z)	(Z)	1	1
Power plants	126 991	64 896	21 737	40 358	4	1	6	12
Sewage treatment and water treatment plants	157 542	124 298	(D)	(D)	7	8	(D)	(D)
Oilfields	92 152	50 033	10 019	32 099	12	18	11	6
Other nonbuilding construction	198 980	109 354	53 070	36 556	7	8	16	6
Construction work, n.s.k.	214 727	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)
1987								
Value of construction work	5 598 712	3 182 619	1 079 416	1 112 469	1	1	2	1
Building construction	2 767 519	1 756 514	656 454	343 923	2	2	4	3
Single-family houses	583 271	350 059	129 304	103 907	5	8	6	8
Single-family houses, detached	540 323	329 153	119 093	92 076	6	8	6	9
Single-family houses, attached, including townhouses and townhouse-type condominiums	42 947	20 905	10 211	11 830	16	26	19	24
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	110 754	78 293	15 633	16 828	8	9	24	10
Other residential buildings, including hotels, motels, and tourist cabins	86 187	40 302	30 006	15 877	11	7	30	9
Office buildings	460 374	309 429	108 589	42 355	3	3	6	5
Other commercial buildings such as stores, restaurants, and automobile service stations	414 843	261 205	114 243	39 394	4	4	8	6
Industrial buildings and warehouses	449 388	272 789	94 682	81 915	3	4	7	4
Industrial buildings	349 713	201 457	76 453	71 801	3	4	5	5
Warehouses	99 674	71 332	18 229	10 113	7	7	19	6
Religious buildings	78 254	56 259	14 293	7 700	4	4	10	7
Educational buildings	261 172	186 231	61 439	13 501	6	6	10	8
Hospitals and institutional buildings	214 977	135 878	61 692	17 407	4	4	9	6
Other nonresidential buildings	108 299	70 846	26 886	10 577	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	2 606 986	1 421 328	422 649	763 008	1	1	2	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	647 841	395 252	139 522	113 066	2	3	3	3
Marine construction	213 167	144 044	11 959	57 162	(Z)	(Z)	2	(Z)
Conservation and development construction	44 698	22 463	11 818	10 416	3	1	11	1
Power and communication transmission lines, towers, and related facilities	106 384	59 053	28 802	18 528	7	8	5	16
Sewers, water mains, and related facilities	135 293	99 771	18 290	17 231	5	7	6	7
Sewers, sewer lines, septic systems, and related facilities	82 803	59 313	12 788	10 701	6	7	5	9
Water mains and related facilities	52 489	40 458	5 501	6 529	9	12	10	12
Pipeline construction other than sewer or water lines	119 268	76 885	31 071	11 310	5	5	13	12
Blast furnaces, petroleum refineries, chemical complexes, etc.	786 163	236 189	112 793	437 180	1	1	1	1
Sewage treatment and water treatment plants	86 799	60 145	22 957	3 695	5	7	1	16
Oilfields	64 262	31 251	7 549	25 461	10	16	13	6
Other nonbuilding construction	403 111	296 275	37 888	68 959	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	224 206	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	6 404	75 352	73 498	76 456	76 895	74 558	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	807	2 497	2 448	2 604	2 605	2 331	6	8	8	8	9	9
1522	Other residential buildings -----	72	332	357	310	348	312	24	18	16	16	17	29
1531	Operative builders -----	127	174	163	167	198	169	18	30	27	30	30	34
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	147	1 840	1 605	1 778	1 917	2 061	17	6	8	7	5	9
1542	Nonresidential buildings, n.e.c. ----	368	4 101	3 815	4 166	4 241	4 181	9	6	6	6	8	6
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	132	5 619	5 012	5 889	6 162	5 414	14	2	2	3	2	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	12	(D)	(D)	(D)	(D)	(D)	18	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	203	3 816	3 413	3 720	4 228	3 902	14	5	5	5	5	5
1629	Heavy construction, n.e.c. -----	437	22 264	22 780	22 839	21 542	21 894	7	1	1	1	1	2
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 006	6 006	5 860	6 089	6 164	5 909	3	2	2	2	2	2
1721	Painting and paper hanging -----	291	3 099	2 704	3 255	3 388	3 050	5	4	6	5	5	5
1731	Electrical work -----	737	7 220	7 334	7 408	7 299	6 839	4	2	2	3	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	160	1 333	1 377	1 243	1 277	1 436	3	6	6	8	7	7
1742	Plastering, drywall, and insulation work -----	166	2 700	2 514	2 672	2 793	2 821	9	3	3	3	3	3
1743	Terrazzo, tile, marble, and mosaic work -----	71	373	399	368	365	361	11	21	23	21	18	20
175	Carpentry and floor work:												
1751	Carpentry -----	275	919	816	848	1 019	993	6	11	13	13	13	13
1752	Floor laying and other floor work --	102	374	385	358	382	371	12	16	16	16	15	16
1761	Roofing, siding, and sheet metal work -----	374	2 198	2 266	2 214	2 178	2 135	5	5	6	5	5	5
1771	Concrete work -----	133	785	695	868	903	672	7	9	10	9	12	13
1781	Water well drilling -----	31	96	99	101	94	90	8	9	8	8	8	9
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	77	695	740	645	695	699	18	10	10	9	10	11
1793	Glass and glazing work -----	52	264	245	277	271	262	16	13	12	15	15	13
1794	Excavation work -----	81	464	440	481	478	457	22	17	16	18	17	20
1795	Wrecking and demolition work -----	13	(D)	(D)	(D)	(D)	(D)	20	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	59	930	790	893	1 001	1 036	13	3	2	7	2	2
1799	Special trade contractors, n.e.c. ----	471	5 610	5 606	5 676	5 558	5 598	8	3	3	3	4	3

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	14.3	22.9	100.1	.279	.348	.165	.213	.023
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.3	14.7	149.2	.136	.385	.310	.040	.011
1522	Other residential buildings -----	6.3	20.5	120.4	.235	.281	.262	(S)	.018
1531	Operative builders -----	4.1	18.3	896.7	.061	.337	.267	*.007	.002
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	15.8	20.5	106.7	.244	.293	.293	.083	.021
1542	Nonresidential buildings, n.e.c. -----	14.4	20.4	212.3	.124	.262	.503	.023	.006
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	50.4	19.3	119.4	.191	.501	.154	.133	.025
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	22.3	23.7	111.7	.251	.302	.113	.063	.044
1629	Heavy construction, n.e.c. -----	58.3	27.5	85.1	.369	.280	.124	.094	.040
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.0	22.8	111.8	.274	.427	.118	.483	.016
1721	Painting and paper hanging -----	12.2	19.5	58.2	.385	.248	.071	.368	.028
1731	Electrical work -----	12.3	23.9	84.4	.357	.402	.027	.565	.011
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1742	Plastering, drywall, and insulation work -----	19.0	26.3	70.3	.436	.391	.066	.476	.008
1743	Terrazzo, tile, marble, and mosaic work -----	6.8	16.6	68.0	.314	.469	.056	.614	.006
175	Carpentry and floor work:								
1751	Carpentry -----	4.4	17.2	85.2	.269	.404	.143	.514	.007
1752	Floor laying and other floor work -----	5.0	16.3	106.9	.205	.480	.088	.566	.014
1761	Roofing, siding, and sheet metal work -----	7.8	17.4	84.6	.272	.394	.066	.394	.012
1771	Concrete work -----	7.3	13.6	75.5	.222	.397	.085	.410	.021
1781	Water well drilling -----	3.6	13.5	69.7	.223	.448	.005	.038	.004
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	11.3	22.3	96.3	.291	.293	.053	.542	.023
1793	Glass and glazing work -----	7.6	17.6	86.3	.304	.610	*.016	.583	.010
1794	Excavation work -----	7.0	15.7	75.0	.255	.320	.081	.554	.055
1795	Wrecking and demolition work -----	(D)	(D)	(D)	(D)	(D)	.035	(D)	.023
1796	Installing building equipment, n.e.c. -----	21.8	27.1	94.9	.392	.308	.077	.193	.020
1799	Special trade contractors, n.e.c. -----	14.1	20.8	62.1	.396	.318	.060	.284	.023

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	NEW ORLEANS, LA MSA											
15,16,17	Construction industries	1 895	20 124	471 829	1 971 156	1 617 749	908 293	745 705	353 407	30 813	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S) 35	932 261	16 097 5 680	(S) 21 087	(S) 16 329	40 395 11 151	(S) 5 257	(S) 4 758	(S) 152	13 21	(S) 14
1522	Other residential buildings											
1531	Operative builders	21	117	1 836	34 062	19 570	9 346	10 227	*14 492	(D)	20	16
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	31	260	(S) 33 451	(S) 281 258	(S) 122 209	(S) 44 792	5 766 84 099	(S) 159 049	(S) 1 561	22 5	(S) 9
1542	Nonresidential buildings, n.e.c.	86	1 364									
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	12	350	7 680	54 134	48 187	22 057	*28 127	5 947	1 623	2	26
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	*3	(D) 905	(D) 23 615	(D) 76 024	(D) 65 791	(D) 37 986	(D) 27 906	(D) 10 233	(D) 4 372	(D) 3	(D) 5
1623	Water, sewer, and utility lines	23										
1629	Heavy construction, n.e.c.	87	2 537	71 447	328 481	284 094	157 903	133 748	44 388	11 666	3	3
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	379	2 737	62 740	234 325	204 713	118 838	87 118	29 612	1 722	4	3
1721	Painting and paper hanging	90	851	15 342	35 900	33 558	22 910	11 595	*2 341	(S)	12	9
1731	Electrical work	261	2 884	73 044	211 350	208 020	131 197	81 567	3 330	1 260	3	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	339	9 881	26 794	26 683	16 792	9 897	(S)	*99	9	8
1742	Plastering, drywall, and insulation work	(S)	645	12 442	42 235	34 456	20 719	13 787	*7 779	(S)	7	5
1743	Terrazzo, tile, marble, and mosaic work	16	131	2 847	7 669	(D)	3 068	3 578	(D)	*401	22	(D)
175	Carpentry and floor work:											
1751	Carpentry	84	374	7 737	23 718	23 040	13 264	10 644	(S) 1 901	(S) 372	11	30
1752	Floor laying and other floor work	34	230	(D)	18 012	16 111	(D)	7 536		*54	26	26
1761	Roofing, siding, and sheet metal work	129	868	14 614	63 774	58 668	34 814	25 418	5 106	303	6	8
1771	Concrete work	26	161	2 332	13 551	12 314	4 523	7 791	1 237	(D)	29	22
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	23	295	6 329	25 166	24 105	16 236	7 996	1 061	372	11	30
1793	Glass and glazing work	28	(D) 3 725	11 987	11 987	11 649	5 814	7 159	*338	(S) 372	(D) 17	17
1794	Excavation work	20	98	1 921	6 360	*6 146	4 277	*2 097	214	223	38	41
1795	Wrecking and demolition work	8	110	2 195	(D)	(D)	(D)	2 397	(D)	(D)	22	(D)
1796	Installing building equipment, n.e.c.	19	457	15 311	36 466	35 414	23 902	14 785	1 052	394	(Z)	(Z)
1799	Special trade contractors, n.e.c.	124	1 793	40 870	108 073	103 416	66 369	40 148	4 657	1 202	5	6

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Oklahoma. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 26,367 establishments in this State operating in the construction industries. These establishments accounted for \$4.8 billion in total dollar value of business done.

Most of the 26,367 construction establishments were small. Of the total, 20,771 were nonemployers, and over half of the employer establishments had less than 5 employees. The 2,133 construction establishments with 5 employees or more, while representing only 8 percent of all establishments, accounted for more than 75 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$4.3 billion in total dollar value of business done. Of this amount, \$4.2 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$995 million, leaving net value of construction work of \$3.2 billion. In addition, these establishments paid out \$1.6 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$1.9 billion. (See Introduction and appendixes for explanation of terms.)

There were 5,596 establishments with total employment averaging 43,687 during the year. Total payroll for 1992 was \$933 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 20,771 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$557 million. Most of these establishments, about 84 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

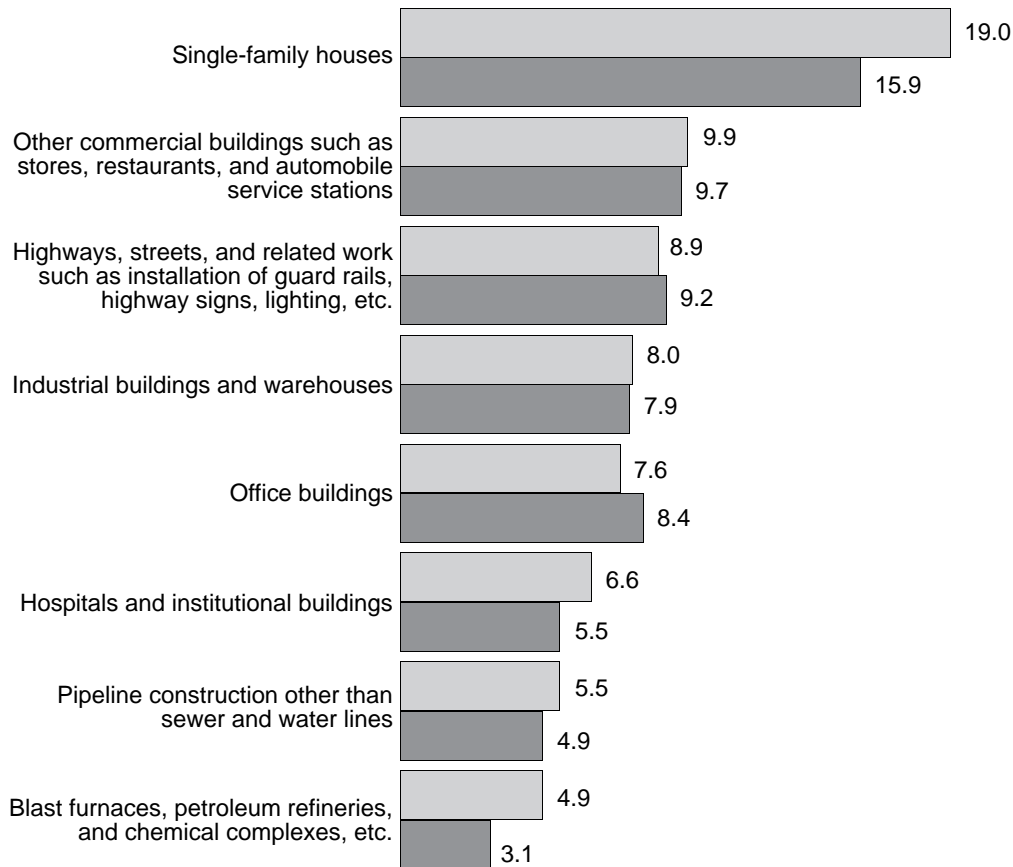




Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

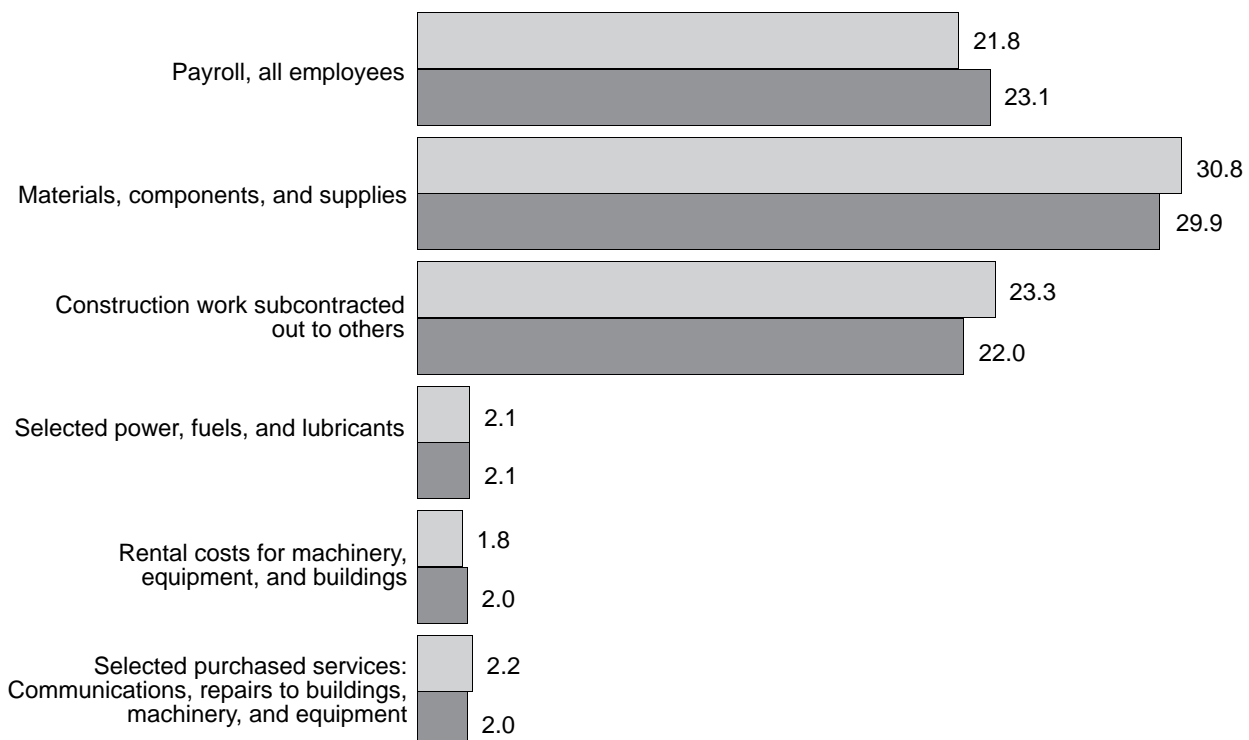


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	26 367	22 995	43 687	4 833 961	20 771	20 373	556 699	5 596	2 622	43 687	4 277 262	1	1
15	Building construction—General contractors and operative builders ----	3 959	2 947	8 907	1 690 118	2 742	2 464	191 460	1 217	483	8 907	1 498 658	3	3
16	Heavy construction other than building construction—contractors -----	1 351	963	10 207	1 105 706	666	657	16 558	685	306	10 207	1 089 148	2	2
17	Special trade contractors -----	21 058	19 086	24 573	2 038 137	17 363	17 252	348 681	3 695	1 834	24 573	1 689 456	2	2
1711	Plumbing, heating, and air-conditioning --	2 683	2 170	5 235	491 321	1 726	1 707	55 077	957	(S)	5 235	436 244	4	3
1731	Electrical work -----	1 635	1 205	4 443	343 239	1 056	1 031	23 484	579	174	4 443	319 755	3	3
	1987													
15, 16, 17	Construction industries² -----	31 097	26 713	38 728	4 061 546	25 893	25 451	931 706	5 204	1 262	38 728	3 129 840	1	2
15	Building construction—General contractors and operative builders ----	5 582	4 306	7 639	1 372 764	4 511	4 138	336 791	1 071	168	7 639	1 035 973	4	4
16	Heavy construction other than building construction—contractors -----	1 405	797	10 582	893 411	685	678	41 705	720	119	10 582	851 706	2	2
17	Special trade contractors -----	23 471	21 071	20 135	1 700 949	20 147	20 102	484 388	3 324	969	20 135	1 216 561	2	2
1711	Plumbing, heating, and air-conditioning --	3 083	2 415	4 858	435 226	2 193	2 174	72 463	890	241	4 858	362 763	3	3
1731	Electrical work -----	1 954	1 455	4 006	273 844	1 361	1 345	39 745	593	110	4 006	234 099	4	3

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	5 596	43 687	34 294	933 174	674 857	4 215 793	3 220 952	1 875 399
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	590	2 262	1 570	36 684	21 095	298 739	211 328	120 407
1522	Other residential buildings -----	22	121	101	1 714	1 395	9 770	7 033	4 543
1531	Operative builders -----	152	465	*232	11 758	*4 735	184 859	109 693	48 216
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	77	924	715	24 186	17 279	117 745	75 083	46 048
1542	Nonresidential buildings, n.e.c. -----	375	5 136	3 735	98 901	63 277	870 775	372 697	169 856
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	151	3 013	2 518	69 503	50 930	380 351	322 154	142 057
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	29	691	607	17 825	14 265	93 399	76 335	40 173
1623	Water, sewer, and utility lines -----	216	3 456	2 850	115 030	88 234	340 756	292 327	228 901
1629	Heavy construction, n.e.c. -----	288	3 047	2 414	71 483	52 666	261 921	236 594	161 920
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	957	5 235	3 853	108 461	76 436	432 174	392 416	199 734
1721	Painting and paper hanging -----	306	1 278	1 082	21 934	17 345	64 939	59 922	43 530
1731	Electrical work -----	579	4 443	3 464	102 082	74 703	311 558	300 054	180 292
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	142	1 492	1 361	33 753	29 406	90 123	(D)	53 499
1742	Plastering, drywall, and insulation work -----	200	1 533	1 238	26 703	20 835	83 953	71 667	42 909
1743	Terrazzo, tile, marble, and mosaic work -----	46	231	174	4 610	3 117	14 887	14 582	9 348
175	Carpentry and floor work:								
1751	Carpentry -----	357	1 634	1 367	27 623	21 855	113 511	85 835	56 777
1752	Floor laying and other floor work -----	78	367	288	6 090	4 544	25 570	23 475	10 928
1761	Roofing, siding, and sheet metal work -----	257	2 008	1 566	39 678	28 121	139 261	132 337	78 925
1771	Concrete work -----	215	1 335	1 145	18 322	14 837	71 829	65 404	42 627
1781	Water well drilling -----	41	147	115	1 766	1 239	7 374	7 343	4 554
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	64	854	693	19 916	14 125	56 143	50 846	32 421
1793	Glass and glazing work -----	53	328	227	6 363	3 671	19 427	19 291	10 439
1794	Excavation work -----	64	369	304	7 123	5 325	40 503	32 980	25 364
1795	Wrecking and demolition work -----	13	100	76	2 871	1 769	10 489	10 460	7 716
1796	Installing building equipment, n.e.c. -----	34	705	592	13 689	11 237	44 963	(D)	30 440
1799	Special trade contractors, n.e.c. -----	290	2 514	2 007	45 106	32 417	130 774	122 058	83 774

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
1 407 022	994 841	1 035 484	77 283	81 453	685 706	38 728	3 030 883	1 421 363	1	1	4	15, 16, 17
												15
95 966	87 411	*8 976	(S)	1 395	15 859	1 700	173 060	55 181	11	13	24	152
2 490	2 738	*133	29	73	1 168	250	28 203	*9 023	34	18	23	1521
66 214	75 166	298	331	*1 298	6 504	*645	108 305	*23 825	32	17	53	1531
29 816	42 662	4 007	866	*1 156	8 713	592	57 246	21 728	14	12	40	154
209 048	498 078	8 081	11 081	5 332	46 362	4 452	640 077	150 301	3	3	19	1541
												1542
												16
185 350	58 198	80 377	11 093	14 428	132 258	3 048	323 558	164 600	3	2	12	1611
38 067	17 064	16 766	2 799	1 828	30 683	649	62 085	34 913	7	6	8	162
65 562	48 430	60 260	18 874	14 764	136 702	3 097	224 745	164 829	4	4	9	1622
78 099	25 327	22 036	5 424	7 486	57 107	3 788	203 689	105 203	5	4	8	1623
												1629
												17
196 752	39 758	261 863	6 316	8 516	65 072	4 858	357 830	184 434	4	3	14	1711
16 395	5 017	26 330	731	1 295	9 010	998	43 812	32 356	7	7	10	1721
127 960	11 504	152 456	4 440	5 956	42 597	4 006	231 531	129 881	3	3	18	1731
(D)	(D)	38 364	(S)	2 461	7 732	515	19 320	12 162	2	(D)	8	174
29 310	(S)	50 752	774	*1 183	10 208	1 397	74 300	42 728	8	8	52	1741
(D)	305	11 255	55	68	2 525	150	9 105	4 955	15	15	(Z)	1742
												1743
30 135	27 676	56 631	791	2 191	9 075	844	44 787	25 168	7	9	17	175
13 133	2 095	12 628	270	607	2 901	223	13 327	6 641	18	11	7	1751
54 343	6 924	56 509	1 264	1 283	21 981	2 179	123 105	67 499	6	6	22	1752
(D)	6 425	41 233	1 371	*1 487	15 012	1 169	52 610	31 456	10	9	45	1761
3 291	31	1 191	80	303	4 249	115	5 956	3 798	12	10	1	1771
												1781
23 176	5 297	19 958	1 265	1 220	14 109	641	39 927	26 582	10	10	25	179
11 513	136	11 784	338	260	3 509	349	19 919	10 506	5	5	31	1791
(S)	7 523	22 543	2 495	2 473	12 064	585	27 394	21 975	17	14	19	1793
3 352	*28	6 865	716	948	7 515	131	8 336	7 713	35	26	20	1794
14 438	(D)	9 420	498	290	2 067	279	22 697	17 533	3	(D)	3	1795
43 293	8 715	54 770	2 932	3 151	20 725	1 696	99 724	58 742	8	8	22	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	5 596	5 204	7 081	6 970	1	1	2	3
Proprietors and working partners.....	2 622	1 262	2 522	4 674	3	7	4	5
All employees**	43 687	38 728	63 606	51 848	1	1	1	1
Construction workers:								
March.....	32 525	28 590	51 657	41 269	1	2	1	2
May	34 299	31 446	52 875	46 466	1	2	1	2
August	36 417	31 848	54 038	46 740	1	2	1	2
November.....	33 936	29 690	51 014	42 940	1	2	2	2
Average.....	34 294	30 393	52 980	44 393	1	2	1	1
Other employees:								
March.....	9 497	8 431	10 379	7 260	2	2	2	2
May	9 306	8 192	(NA)	(NA)	2	2	(NA)	(NA)
August	9 372	8 378	(NA)	(NA)	2	2	(NA)	(NA)
November.....	9 397	8 337	(NA)	(NA)	2	2	(NA)	(NA)
Average.....	9 393	8 334	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	933 174	724 364	1 065 202	579 070	1	1	1	1
Payroll, construction workers	674 857	531 469	831 850	462 678	1	1	1	1
Payroll, other employees	258 317	192 895	233 352	116 392	1	2	1	1
First-quarter payroll, all employees	206 198	160 073	241 577	126 530	1	2	1	1
Fringe benefits, all employees	198 653	144 910	185 664	95 904	1	1	1	1
Legally required expenditures.....	145 824	109 736	139 651	66 839	2	2	1	1
Voluntary expenditures.....	52 829	35 173	46 012	29 066	2	2	1	1
Dollar value of business done	4 277 262	3 129 840	4 348 906	2 468 733	1	2	1	1
Value of construction work	4 215 793	3 030 883	4 236 025	2 366 954	1	2	1	1
Value of construction work subcontracted in from others	1 035 484	639 344	1 017 740	567 849	3	3	2	2
Other business receipts	61 469	78 089	80 437	101 779	7	6	3	3
Net value of construction†	3 220 952	2 342 871	3 332 003	1 904 216	1	1	1	1
Value added††	1 875 399	1 421 363	2 038 342	1 097 580	1	2	1	1
Selected costs.....	2 401 863	1 687 609	2 278 119	1 348 946	2	2	1	2
Materials, components, and supplies	1 315 468	934 337	1 276 934	835 823	1	2	1	1
Construction work subcontracted out to others	994 841	688 011	904 021	462 738	3	4	1	3
Selected power, fuels, and lubricants	91 554	65 260	97 164	50 385	2	2	2	2
Electricity.....	12 871	8 539	9 925	5 360	5	4	2	3
Natural gas	5 803	3 299	4 223	3 384	5	4	2	7
Gasoline and diesel fuel	66 624	49 055	76 197	35 310	2	2	2	2
On highway use.....	42 644	32 376	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use.....	23 981	16 678	(NA)	(NA)	4	3	(NA)	(NA)
Other, including lubricating oils and greases.....	6 255	4 367	6 818	5 331	4	7	4	4
Rental cost for machinery, equipment, and buildings	77 283	62 781	64 361	30 995	4	3	2	2
For machinery and equipment	61 483	46 157	50 194	25 722	5	4	2	2
For buildings.....	15 800	16 624	14 167	5 273	5	5	3	3
Selected purchased services	93 316	62 633	84 195	51 843	3	4	2	2
Communication services	21 074	15 809	17 795	10 583	4	5	2	3
Repairs to buildings and other structures	4 386	2 720	4 596	2 275	13	8	5	8
Repairs to machinery and equipment	67 856	44 103	61 804	38 985	3	4	2	2
Ownership of construction projects:								
Value of construction work	4 215 793	3 030 883	4 236 025	2 366 954	1	2	1	1
Government owned	1 145 177	929 159	615 375	516 807	4	3	5	1
Federal	387 610	282 087	(NA)	(NA)	5	5	(NA)	(NA)
State and local	757 567	647 071	(NA)	(NA)	5	4	(NA)	(NA)
Privately owned	3 070 616	2 101 723	3 620 649	1 850 147	3	3	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	649 032	557 468	3	3
Capital expenditures, other than land -----	81 453	49 442	4	5
New -----	60 435	28 947	5	7
Used -----	21 018	20 495	8	7
Retirements and disposition of depreciable assets -----	44 779	39 541	14	15
End-of-year gross book value of depreciable assets -----	685 706	567 369	3	3
Depreciation charges during year -----	71 561	67 275	3	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	78 405	96 836	6	7
Capital expenditures, other than land -----	8 212	5 656	16	13
New buildings and other structures -----	5 492	3 708	16	19
Used buildings and other structures -----	2 720	1 948	36	11
Retirements and disposition of depreciable assets -----	6 699	*8 721	38	62
End-of-year gross book value of depreciable assets -----	79 918	93 771	5	5
Depreciation charges during year -----	6 255	7 157	7	7
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	570 626	460 632	3	3
Capital expenditures, other than land -----	73 241	43 785	4	5
New machinery and equipment, including automobiles and trucks -----	54 943	25 239	5	7
New automobiles and trucks, intended primarily for highway use -----	19 139	12 634	6	8
Used machinery and equipment, including automobiles and trucks -----	18 298	18 546	7	7
Retirements and disposition of depreciable assets -----	38 080	30 819	15	7
End-of-year gross book value of depreciable assets -----	605 788	473 598	3	3
Depreciation charges during year -----	65 306	60 117	4	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	5 596	1
Value of construction work	4 215 793	1
Establishments with inventories:		
Number	1 649	3
Value of construction work	1 339 984	2
Inventories ¹ :		
End of 1992, materials and supplies	46 933	7
End of 1991, materials and supplies	46 079	8
Establishments with no inventories:		
Number	2 011	3
Value of construction work	1 867 155	2
Establishments not reporting:		
Number	1 936	3
Value of construction work	1 008 654	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	5 596	3 463	1 094	594	334	82	19	8	1	1
All employees** -----	43 687	6 319	6 938	7 829	9 874	5 498	2 673	4 555	(D)	(D)
Payroll, all employees -----	933 174	94 607	114 604	166 745	227 643	132 894	73 935	122 747	(D)	(D)
Dollar value of business done -----	4 277 262	671 634	491 979	711 093	1 016 507	583 785	308 477	493 787	(D)	(D)
Value of construction work -----	4 215 793	662 971	483 812	694 075	1 001 691	576 772	302 685	493 787	(D)	(D)
Net value of construction work† -----	3 220 952	499 383	404 043	543 687	761 670	458 215	553 955	(D)	(D)	(D)
Value added†† -----	1 875 399	276 892	237 065	322 886	422 729	266 853	121 970	227 005	(D)	(D)
Cost of materials, components, supplies, and fuels -----	1 407 022	231 155	175 145	237 818	353 758	198 375	210 772	(D)	(D)	(D)
Cost of construction work subcontracted out to others -----	994 841	163 588	79 769	150 389	240 021	118 557	242 517	(D)	(D)	(D)
Rental cost for machinery, equipment, and buildings -----	77 283	6 056	11 646	10 408	15 392	10 718	11 554	11 508	(D)	(D)
Capital expenditures, other than land -----	81 453	10 341	9 162	12 178	20 973	15 095	3 964	9 740	(D)	(D)
End-of-year gross book value of depreciable assets -----	685 706	86 559	86 684	99 962	147 157	135 645	85 153	44 546	(D)	(D)
1987										
All employees** -----	38 728	6 072	7 305	6 974	8 678	4 258	2 933	2 505	(D)	—
Value of construction work -----	3 030 883	479 640	449 230	516 960	752 190	431 437	401 424	(D)	(D)	—
Value added†† -----	1 421 363	191 038	232 612	263 688	338 629	157 484	164 030	73 880	(D)	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	4	6	6	4	(Z)	(Z)	(Z)	(D)	(D)
Net value of construction work† -----	1	6	6	6	3	(Z)	(Z)	(D)	(D)	(D)
Capital expenditures, other than land -----	4	15	16	12	5	(Z)	(Z)	(Z)	(D)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	5 596	(S)	(S)	764	1 635	783	623	509	211	81	49
All employees** -----	43 687	(S)	(S)	1 395	5 183	4 376	5 726	7 802	6 499	4 147	7 641
Payroll, all employees -----	933 174	(S)	(S)	14 214	67 382	71 368	114 461	171 889	161 687	107 183	217 447
Dollar value of business done -----	4 277 262	(S)	(S)	55 049	260 817	269 684	441 982	768 093	736 856	551 543	1 167 995
Value of construction work -----	4 215 793	(S)	(S)	53 899	257 883	265 230	433 048	752 353	720 377	542 976	1 164 972
Net value of construction work† -----	3 220 952	(S)	(S)	50 212	235 481	236 878	375 533	601 003	568 917	401 148	728 632
Value added†† -----	1 875 399	(S)	(S)	30 201	144 131	138 551	217 796	352 460	328 874	222 035	427 036
Cost of materials, components, supplies, and fuels -----	1 407 022	(S)	(S)	21 161	94 283	102 780	166 671	264 284	256 522	187 680	304 619
Cost of construction work subcontracted out to others -----	994 841	(S)	(S)	3 687	(S)	28 353	57 516	151 350	151 461	141 828	436 340
Rental cost for machinery, equipment, and buildings -----	77 283	(S)	(S)	644	3 894	4 971	11 440	10 092	11 119	9 891	24 628
Capital expenditures, other than land -----	81 453	(S)	(S)	1 235	5 226	6 511	10 488	11 913	16 175	10 998	18 527
End-of-year gross book value of depreciable assets -----	685 706	(S)	(S)	15 835	47 200	62 485	78 397	96 778	103 463	109 266	168 934
1987											
All employees** -----	38 728	(S)	(S)	(S)	5 185	4 493	5 609	6 950	4 774	4 000	4 882
Value of construction work -----	3 030 883	(S)	(S)	(S)	226 657	270 448	372 180	615 570	447 288	400 491	608 704
Value added†† -----	1 421 363	(S)	(S)	(S)	130 097	132 947	196 795	292 406	212 717	152 855	252 633
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	10	7	7	6	5	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	8	6	7	6	6	5	2	(Z)
Capital expenditures, other than land -----	4	(S)	(S)	24	19	22	13	11	5	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

OK-10 OKLAHOMA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair	A	B	C	D
	A	B	C	D	A	B	C	D
1992								
Value of construction work	4 215 793	2 369 514	984 430	705 478	1	2	2	2
Building construction	2 693 907	1 598 359	718 298	377 249	2	3	3	4
Single-family houses	799 540	526 420	154 142	118 977	6	8	8	6
Single-family houses, detached	760 890	511 097	142 082	107 711	6	9	9	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	38 649	15 323	12 061	11 266	13	21	17	16
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	37 764	3 712	(S)	19 319	8	5	(S)	10
Office buildings	320 659	141 021	133 418	46 221	4	5	7	8
Other commercial buildings such as stores, restaurants, and automobile service stations	419 252	259 138	105 322	54 792	4	5	8	7
Industrial buildings and warehouses	338 679	172 692	102 786	63 201	5	8	7	11
Industrial buildings	282 202	140 811	85 578	55 812	6	9	7	12
Warehouses	56 478	31 880	17 208	7 389	7	9	14	20
Religious buildings	79 213	47 521	24 101	7 592	5	5	13	7
Educational buildings	199 290	118 546	58 184	22 561	6	6	9	18
Hospitals and institutional buildings	279 253	176 102	82 125	21 025	2	2	5	4
Amusement, social, and recreational buildings, indoors	26 876	18 871	5 036	2 969	7	7	19	18
Other nonresidential buildings	193 380	134 337	38 451	20 593	3	3	7	8
Nonbuilding construction	1 365 514	771 154	266 131	328 229	1	2	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	376 401	198 006	121 512	56 883	2	3	4	6
Airport runways and related work	28 608	6 890	(D)	(D)	1	4	(D)	(D)
Private driveways and parking areas	28 877	15 667	5 537	*7 674	20	16	28	41
Bridges, tunnels, and elevated highways	83 674	73 635	(D)	(D)	5	5	(D)	(D)
Conservation and development construction	22 238	(S)	642	4 392	26	(S)	14	27
Power and communication transmission lines, towers, and related facilities	89 730	60 163	16 192	13 376	11	12	12	18
Sewers, water mains, and related facilities	106 072	70 647	14 229	21 196	9	11	14	20
Sewers, sewer lines, septic systems, and related facilities	62 781	36 177	7 311	19 292	9	8	15	22
Water mains and related facilities	43 291	34 469	6 918	1 904	16	19	15	20
Pipeline construction other than sewer or water lines	231 213	155 842	41 236	34 136	2	1	3	3
Blast furnaces, petroleum refineries, chemical complexes, etc.	206 951	61 921	16 915	128 114	2	3	11	1
Power plants	22 592	4 309	6 077	(S)	6	(Z)	8	(S)
Sewage treatment and water treatment plants	47 806	30 531	(S)	5 101	9	12	(S)	16
Oilfields	51 520	36 695	5 357	9 468	18	24	28	16
Other nonbuilding construction	69 831	39 645	7 651	22 535	8	11	10	6
Construction work, n.s.k.	156 372	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
1987								
Value of construction work	3 030 883	1 673 061	720 599	476 121	2	2	2	3
Building construction	1 887 511	1 117 579	489 679	276 357	3	4	3	4
Single-family houses	481 964	300 765	98 287	82 911	6	9	7	6
Single-family houses, detached	440 504	274 014	93 038	73 451	7	10	8	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	41 460	26 750	5 248	9 460	14	19	10	18
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	61 098	33 151	14 572	13 373	17	30	16	10
Office buildings	254 407	126 744	86 992	40 671	4	4	6	7
Other commercial buildings such as stores, restaurants, and automobile service stations	292 522	185 163	60 579	46 779	5	5	7	11
Industrial buildings and warehouses	239 000	126 680	73 866	38 453	4	4	7	10
Industrial buildings	200 527	103 014	64 155	33 358	5	5	7	11
Warehouses	38 472	23 666	9 711	5 094	6	6	18	10
Religious buildings	45 455	27 742	11 298	6 414	5	6	11	11
Educational buildings	205 282	134 401	57 634	13 247	4	5	3	8
Hospitals and institutional buildings	167 261	109 212	46 184	11 865	18	20	17	7
Amusement, social, and recreational buildings, indoors	27 769	22 064	3 189	2 516	7	7	14	30
Other nonresidential buildings	112 753	55 084	37 337	20 338	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	982 271	552 055	230 661	199 554	2	2	4	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	279 683	139 210	82 725	57 747	4	5	7	6
Power and communication transmission lines, towers, and related facilities	46 387	31 830	7 234	7 323	9	10	10	26
Sewers, water mains, and related facilities	70 713	51 646	10 560	8 506	9	11	10	19
Sewers, sewer lines, septic systems, and related facilities	35 024	25 328	4 514	5 181	13	16	21	23
Water mains and related facilities	35 688	26 317	6 045	3 325	9	11	3	32
Pipeline construction other than sewer or water lines	149 112	85 094	54 680	9 337	3	2	2	18
Blast furnaces, petroleum refineries, chemical complexes, etc.	94 825	39 734	8 457	46 633	4	5	8	5
Power plants	26 211	17 857	3 128	5 226	1	1	(Z)	1
Sewage treatment and water treatment plants	32 691	16 172	12 986	3 531	12	7	26	34
Oilfields	33 457	19 378	6 152	7 926	15	17	24	19
Other nonbuilding construction	249 192	151 134	44 739	53 325	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	161 101	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	5 596	34 294	32 525	34 299	36 417	33 936	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	590	1 570	1 394	1 657	1 711	1 520	6	12	13	12	12	13
1522	Other residential buildings -----	22	101	89	101	*124	*89	26	37	35	23	45	42
1531	Operative builders -----	152	*232	*233	*252	*243	*203	15	58	55	54	59	60
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	77	715	666	691	749	757	20	16	16	18	19	14
1542	Nonresidential buildings, n.e.c. ----	375	3 735	3 736	3 721	3 711	3 774	7	3	3	4	4	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	151	2 518	2 309	2 549	2 661	2 551	11	3	3	3	3	4
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	29	607	593	611	597	626	18	7	6	6	7	9
1623	Water, sewer, and utility lines -----	216	2 850	2 248	2 772	3 653	2 727	10	4	5	5	3	5
1629	Heavy construction, n.e.c. -----	288	2 414	2 507	2 462	2 385	2 302	8	5	4	4	5	5
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	957	3 853	3 685	3 988	4 103	3 636	3	4	4	4	4	4
1721	Painting and paper hanging -----	306	1 082	948	1 100	1 181	1 100	6	7	9	8	6	8
1731	Electrical work -----	579	3 464	3 297	3 440	3 645	3 476	4	3	3	3	3	4
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	142	1 361	1 472	1 194	1 235	1 542	5	2	4	3	3	2
1742	Plastering, drywall, and insulation work -----	200	1 238	1 205	1 238	1 239	1 269	10	8	9	8	8	7
1743	Terrazzo, tile, marble, and mosaic work -----	46	174	171	150	169	206	13	16	15	16	18	17
175	Carpentry and floor work:												
1751	Carpentry -----	357	1 367	1 045	1 244	1 634	1 544	7	7	10	9	7	6
1752	Floor laying and other floor work --	78	288	238	264	348	301	16	20	19	17	24	21
1761	Roofing, siding, and sheet metal work -----	257	1 566	1 516	1 529	1 659	1 562	6	6	7	6	6	7
1771	Concrete work -----	215	1 145	933	1 359	1 273	1 015	9	10	11	16	10	10
1781	Water well drilling -----	41	115	99	113	118	129	8	9	11	9	9	7
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	64	693	734	681	664	693	19	9	9	8	10	10
1793	Glass and glazing work -----	53	227	212	239	247	209	14	4	4	3	4	3
1794	Excavation work -----	64	304	294	302	316	305	18	17	17	16	17	18
1795	Wrecking and demolition work -----	13	76	69	76	84	76	38	39	29	39	35	33
1796	Installing building equipment, n.e.c. -----	34	592	743	489	637	497	13	3	2	4	4	4
1799	Special trade contractors, n.e.c. ----	290	2 007	2 090	2 078	2 030	1 829	10	8	7	8	8	8

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	7.8	21.4	122.9	.221	.334	.236	.246	.018
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.8	16.2	190.3	.123	.321	.293	*.030	(S)
1522	Other residential buildings -----	5.4	14.2	96.7	.175	.255	.280	*.014	.003
1531	Operative builders -----	3.1	25.3	*796.8	.064	.358	.407	.002	.002
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	11.9	26.2	164.7	.205	.253	.362	.034	.007
1542	Nonresidential buildings, n.e.c. -----	13.7	19.3	233.1	.114	.240	.572	.009	.013
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	19.9	23.1	151.1	.183	.487	.153	.211	.029
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	23.7	25.8	153.9	.191	.408	.183	.180	.030
1623	Water, sewer, and utility lines -----	16.0	33.3	119.6	.338	.192	.142	.177	.055
1629	Heavy construction, n.e.c. -----	10.6	23.5	108.5	.273	.298	.097	.084	.021
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	5.5	20.7	112.2	.251	.455	.092	.606	.015
1721	Painting and paper hanging -----	4.2	17.2	60.0	.338	.252	.077	.405	.011
1731	Electrical work -----	7.7	23.0	89.9	.328	.411	.037	.489	.014
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	10.5	22.6	66.2	.375	(D)	(D)	.426	(S)
1742	Plastering, drywall, and insulation work -----	7.7	17.4	67.8	.318	.349	(S)	.605	.009
1743	Terrazzo, tile, marble, and mosaic work -----	5.1	20.0	85.6	.310	(D)	.020	.756	.004
175	Carpentry and floor work:								
1751	Carpentry -----	4.6	16.9	83.0	.243	.265	.244	.499	.007
1752	Floor laying and other floor work -----	4.7	16.6	88.8	.238	.514	.082	.494	.011
1761	Roofing, siding, and sheet metal work -----	7.8	19.8	88.9	.285	.390	.050	.406	.009
1771	Concrete work -----	6.2	13.7	62.7	.255	(D)	.089	.574	.019
1781	Water well drilling -----	3.6	12.0	64.1	.239	.446	.004	.161	.011
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	13.3	23.3	81.0	.355	.413	.094	.355	.023
1793	Glass and glazing work -----	6.2	19.4	85.6	.328	.593	.007	.607	.017
1794	Excavation work -----	5.8	19.3	133.2	.176	(S)	.186	.557	.062
1795	Wrecking and demolition work -----	7.7	28.7	138.0	.274	.320	.003	.654	.068
1796	Installing building equipment, n.e.c. -----	20.7	19.4	76.0	.304	.321	(D)	.209	.011
1799	Special trade contractors, n.e.c. -----	8.7	17.9	65.2	.345	.331	.067	.419	.022

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	OKLAHOMA CITY, OK MSA											
15,16,17	Construction industries	1 940	14 947	323 667	1 524 928	1 133 645	633 963	526 892	391 283	29 083	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	1 032	15 929	118 441	92 118	58 201	34 478	26 324	483	20	21
1522	Other residential buildings	6	*71	*829	*3 044	(D)	*1 352	*862	(D)	(D)	56	(D)
1531	Operative builders	64	181	4 913	105 198	62 454	20 728	43 807	42 743	798	18	24
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	34	248	6 152	45 212	22 901	11 385	11 693	22 311	427	17	13
1542	Nonresidential buildings, n.e.c.	114	1 716	42 320	370 742	158 735	88 812	74 471	212 007	2 812	4	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	65	989	23 526	122 496	107 175	41 486	68 402	15 321	4 532	5	6
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	14	220	5 538	24 696	21 247	9 835	11 599	3 449	798	19	17
1623	Water, sewer, and utility lines	67	726	16 837	69 084	58 923	34 884	24 555	10 162	2 573	10	9
1629	Heavy construction, n.e.c.	(S)	560	16 322	33 871	31 493	22 062	10 261	2 378	808	12	10
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	297	1 994	44 405	181 491	158 230	76 372	82 716	23 261	3 829	5	4
1721	Painting and paper hanging	118	524	9 666	33 151	29 446	21 951	7 498	3 705	761	12	12
1731	Electrical work	181	1 820	47 556	135 840	129 580	77 742	57 300	6 260	3 910	5	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	51	401	7 094	18 155	(D)	11 742	5 665	(D)	635	7	(D)
1742	Plastering, drywall, and insulation work	68	519	10 571	25 500	24 630	15 018	10 028	*871	(D)	15	15
1743	Terrazzo, tile, marble, and mosaic work	21	77	1 638	5 828	5 765	4 313	2 673	*63	(D)	6	6
175	Carpentry and floor work:											
1751	Carpentry	184	681	10 170	41 897	35 140	22 082	13 907	*6 758	1 311	14	14
1752	Floor laying and other floor work ...	35	150	2 538	7 633	7 322	4 707	2 903	311	(D)	29	18
1761	Roofing, siding, and sheet metal work	(S)	943	21 017	63 632	60 062	36 239	24 178	3 570	(S)	10	8
1771	Concrete work	77	534	7 473	27 488	24 777	15 049	9 728	2 711	*241	15	15
1781	Water well drilling	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	205	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	20	313	7 124	15 806	13 429	12 341	*4 702	*2 377	(D)	22	33
1793	Glass and glazing work	17	125	2 682	8 011	7 996	3 848	4 485	*15	(D)	9	8
1794	Excavation work	21	209	4 173	22 464	20 079	17 023	3 069	*2 385	1 668	25	18
1795	Wrecking and demolition work	2	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ...	9	96	2 859	8 599	(D)	4 872	3 849	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c.	78	771	10 872	31 986	29 340	18 939	12 342	2 646	1 561	10	14
	TULSA, OK MSA											
15,16,17	Construction industries	1 508	14 756	355 817	1 497 279	1 158 912	713 020	462 646	338 367	26 505	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	(S)	(S)	(S)	(S)	(S)	(S)	42 214	(S)	(S)	(S)
1522	Other residential buildings	*11	46	800	6 273	(D)	2 991	1 451	(D)	43	24	(D)
1531	Operative builders	60	*223	*5 796	55 179	33 738	20 637	15 455	21 441	*468	63	26
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	*17	186	4 577	24 789	18 686	13 185	5 531	6 103	*388	17	13
1542	Nonresidential buildings, n.e.c.	106	1 229	28 106	225 589	96 105	38 162	59 108	129 484	1 881	7	7
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	25	887	22 779	112 751	91 351	50 140	42 184	21 400	3 073	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	51	1 342	68 224	191 435	(D)	136 727	22 829	(D)	6 731	5	(D)
1629	Heavy construction, n.e.c.	29	615	15 561	97 644	81 988	53 798	28 441	15 656	2 273	5	2

OK-14 OKLAHOMA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	TULSA, OK MSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	268	1 833	40 686	159 474	145 877	75 863	71 517	13 597	3 174	7	6
1721	Painting and paper hanging	106	501	8 117	18 901	17 840	12 458	5 381	1 062	172	12	13
1731	Electrical work	178	1 489	32 925	106 922	103 137	60 502	43 799	3 785	999	5	5
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	34	932	24 915	66 318	(D)	37 561	24 785	(D)	1 748	2	(D)
1742	Plastering, drywall, and insulation work	68	774	13 359	46 654	36 806	21 639	15 295	(S)	329	9	8
1743	Terrazzo, tile, marble, and mosaic work	(S)	(D)	1 650	(D)	(D)	(D)	1 865	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	82	705	13 448	54 620	37 492	28 308	9 294	*17 129	609	8	12
1752	Floor laying and other floor work ...	26	93	(D)	5 589	5 192	3 030	(D)	397	147	21	18
1761	Roofing, siding, and sheet metal work	61	605	10 673	42 907	41 031	21 302	19 735	1 876	736	8	11
1771	Concrete work	(S)	323	5 127	16 252	14 440	10 426	4 013	1 812	123	25	18
1781	Water well drilling	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	20	320	7 851	23 037	21 532	10 821	11 552	1 505	707	9	8
1793	Glass and glazing work	18	136	2 330	(D)	(D)	3 930	3 915	(D)	(D)	6	(D)
1794	Excavation work	20	120	2 258	12 339	(D)	6 110	1 700	(D)	(D)	24	(D)
1795	Wrecking and demolition work	*9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ...	11	417	5 922	27 378	27 260	17 690	(D)	(S)	200	(Z)	(Z)
1799	Special trade contractors, n.e.c.	112	1 202	22 996	68 470	64 985	44 124	23 639	3 485	1 014	15	12

Contents

Texas

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Texas. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 131,394 establishments in this State operating in the construction industries. These establishments accounted for \$40.5 billion in total dollar value of business done.

Most of the 131,394 construction establishments were small. Of the total, 102,284 were nonemployers, and over half of the employer establishments had less than 5 employees. The 12,590 construction establishments with 5 employees or more, while representing only 10 percent of all establishments, accounted for more than 83 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$37.7 billion in total dollar value of business done. Of this amount, \$36.7 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$9.3 billion, leaving net value of construction work of \$27.5 billion. In addition, these establishments paid out \$13.2 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$16.4 billion. (See Introduction and appendixes for explanation of terms.)

There were 29,110 establishments with total employment averaging 335,521 during the year. Total payroll for 1992 was \$8.0 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 102,284 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$2.9 billion. Most of these establishments, about 84 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

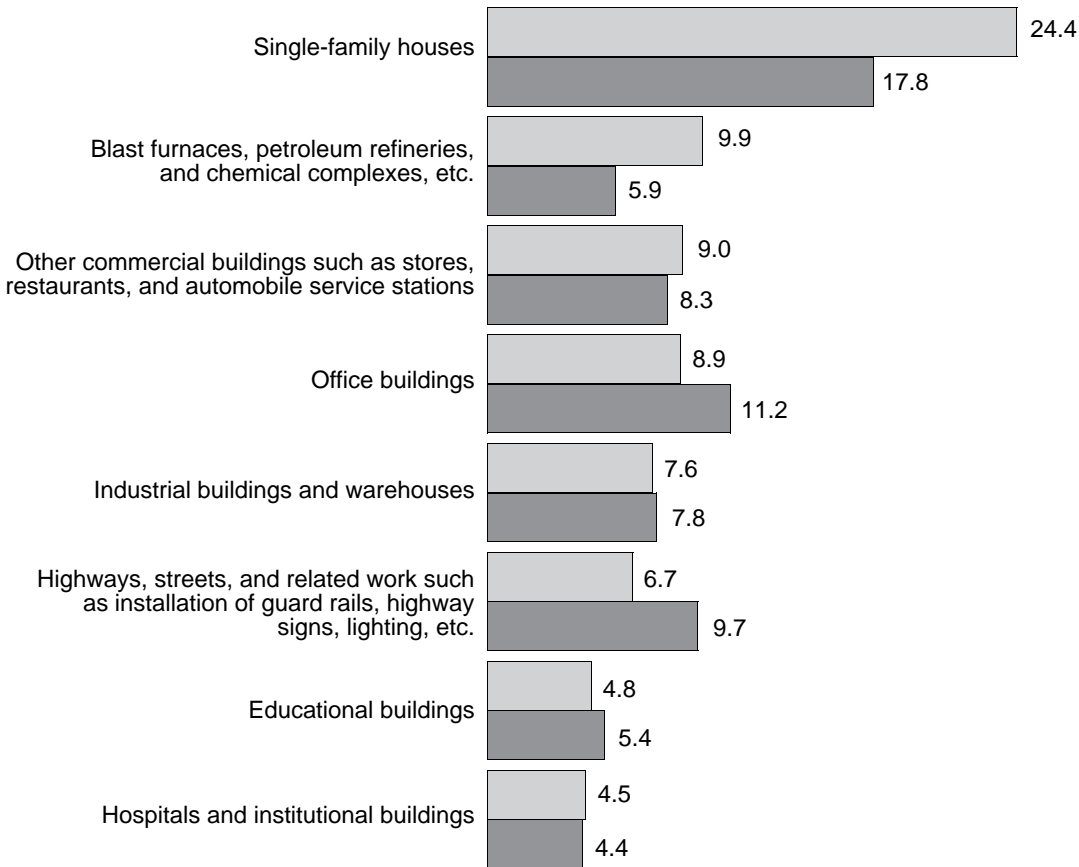




Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

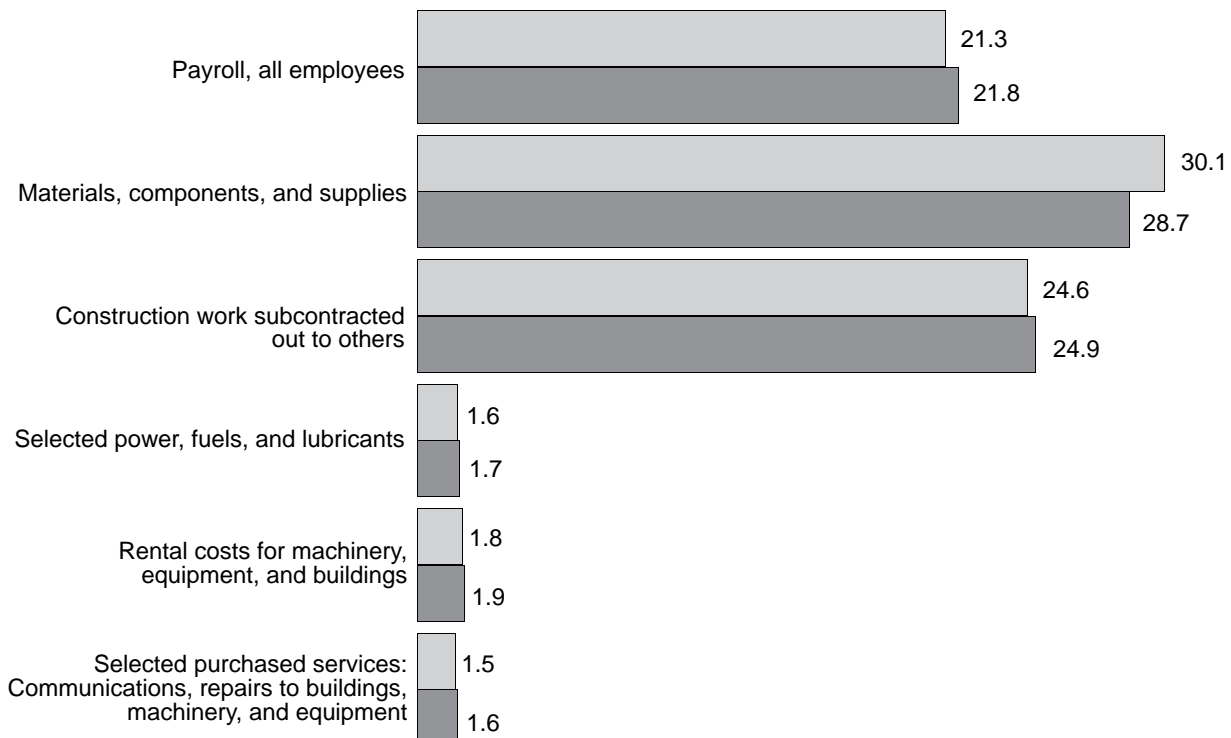


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column —	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done ¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	131 394	113 813	335 521	40 539 593	102 284	100 770	2 883 824	29 110	13 043	335 521	37 655 769	(Z)	1
15	Building construction—General contractors and operative builders ----	20 186	14 305	56 196	15 439 283	13 349	12 057	947 492	6 837	2 248	56 196	14 491 791	1	1
16	Heavy construction other than building construction—contractors -----	5 309	3 430	104 390	10 105 745	2 596	2 519	78 051	2 713	911	104 390	10 027 694	1	1
17	Special trade contractors -----	105 898	96 078	174 936	14 994 564	86 339	86 194	1 858 281	19 559	9 884	174 936	13 136 283	1	1
1711	Plumbing, heating, and air-conditioning --	12 865	10 651	36 218	3 469 478	8 236	8 229	236 732	4 629	2 422	36 218	3 232 746	1	1
1731	Electrical work -----	8 043	6 280	33 662	2 912 980	5 144	5 103	106 076	2 899	1 177	33 662	2 806 904	1	1
	1987													
15, 16, 17	Construction industries ² -----	146 954	121 332	349 578	38 068 185	114 917	114 025	5 841 061	32 037	7 307	349 578	32 227 124	(Z)	1
15	Building construction—General contractors and operative builders ----	28 543	20 464	70 241	14 377 796	21 039	19 169	2 048 261	7 504	1 295	70 241	12 329 535	1	1
16	Heavy construction other than building construction—contractors -----	5 818	3 086	100 434	8 249 637	2 563	2 524	135 368	3 255	562	100 434	8 114 269	1	1
17	Special trade contractors -----	107 915	93 265	174 268	13 361 037	87 613	87 922	2 555 846	20 302	5 343	174 268	10 805 191	1	1
1711	Plumbing, heating, and air-conditioning --	14 175	10 937	36 415	3 076 238	9 656	9 670	345 312	4 519	1 267	36 415	2 730 926	1	1
1731	Electrical work -----	9 037	6 544	32 827	2 283 072	5 884	5 849	189 495	3 153	695	32 827	2 093 577	1	1

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	29 110	335 521	261 195	8 012 865	5 605 753	36 731 358	27 465 448	16 444 347
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3 773	15 228	9 782	273 668	151 163	2 518 180	1 645 859	720 783
1522	Other residential buildings -----	255	2 357	1 745	48 937	29 691	431 541	235 859	132 976
1531	Operative builders -----	553	6 697	1 857	249 571	49 583	4 192 519	2 651 677	1 404 940
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	562	6 265	4 495	152 236	87 501	864 149	517 899	263 169
1542	Nonresidential buildings, n.e.c. -----	1 694	25 650	17 814	651 063	370 931	6 295 322	2 524 307	1 117 805
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	576	20 232	17 249	442 990	332 543	2 227 024	1 790 446	910 065
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	56	1 368	1 136	31 495	23 192	176 393	150 985	84 136
1623	Water, sewer, and utility lines -----	792	16 874	14 133	511 062	393 951	1 946 019	1 690 410	1 160 954
1629	Heavy construction, n.e.c. -----	1 289	65 915	53 842	1 987 962	1 520 257	5 153 334	4 507 245	3 579 148
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	4 629	36 218	26 938	878 467	610 917	3 198 146	2 884 020	1 584 673
1721	Painting and paper hanging -----	1 613	12 448	10 846	224 309	174 970	666 612	583 410	417 755
1731	Electrical work -----	2 899	33 662	26 194	804 653	567 424	2 764 654	2 651 816	1 709 420
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	891	8 438	7 292	137 413	112 214	443 457	399 280	235 541
1742	Plastering, drywall, and insulation work -----	826	10 489	8 681	208 612	159 034	707 091	614 901	368 672
1743	Terrazzo, tile, marble, and mosaic work -----	308	1 913	1 550	36 516	26 824	128 446	118 925	63 665
175	Carpentry and floor work:								
1751	Carpentry -----	1 539	6 951	5 645	125 238	95 825	462 146	392 344	241 918
1752	Floor laying and other floor work -----	417	2 371	1 705	44 178	28 056	225 698	201 305	105 415
1761	Roofing, siding, and sheet metal work -----	1 527	12 809	9 840	231 566	149 896	1 138 647	1 005 284	531 741
1771	Concrete work -----	1 420	13 725	11 644	208 667	154 515	815 285	724 629	393 851
1781	Water well drilling -----	266	1 300	973	22 071	16 191	101 275	99 558	56 893
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	293	4 672	3 905	110 676	82 785	311 941	283 818	191 947
1793	Glass and glazing work -----	335	2 205	1 548	48 213	31 323	150 407	148 028	75 516
1794	Excavation work -----	464	2 787	2 294	54 516	40 824	222 444	197 970	133 574
1795	Wrecking and demolition work -----	47	676	569	15 388	10 363	58 732	45 887	33 409
1796	Installing building equipment, n.e.c. -----	268	4 478	3 451	106 379	75 355	312 571	302 071	202 271
1799	Special trade contractors, n.e.c. -----	1 815	19 795	16 069	407 019	310 425	1 219 324	1 097 515	724 109

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
11 945 512	9 265 910	8 533 291	666 131	549 908	5 230 903	349 578	30 712 341	13 767 035	(Z)	1	3	15, 16, 17
												15
956 867 103 593	872 320 195 681	93 133 *29 402	14 690 2 478	21 327 2 139	213 656 16 808	13 373 3 049	1 408 821 476 460	503 828 126 529	3 7	4 8	13 17	152 1521 1522
1 326 352	1 540 843	12 057	10 635	32 008	170 849	8 519	3 020 431	936 402	4	2	2	1531
277 606 1 461 591	346 250 3 771 014	64 940 164 783	17 039 69 107	11 608 26 858	93 579 244 712	10 411 34 889	810 846 6 107 616	323 973 1 439 212	5 2	6 2	7 6	154 1541 1542
												16
930 340	436 577	431 170	69 526	81 505	755 544	31 776	3 069 721	1 404 933	2	1	4	1611
67 169 545 081 1 387 117	25 409 255 609 646 089	50 843 214 077 655 650	5 907 126 376 131 961	5 554 60 076 104 585	40 775 454 744 1 663 742	3 950 18 995 45 713	400 159 1 480 544 2 753 256	194 806 833 497 1 707 817	7 2 1	5 2 1	10 9 3	162 1622 1623 1629
												17
1 333 946	314 126	1 732 960	54 863	40 422	325 879	36 415	2 687 530	1 341 943	1	1	7	1711
167 913	83 202	341 350	12 228	6 941	67 006	12 022	494 542	340 316	3	4	10	1721
984 646	112 838	1 467 141	36 544	36 158	293 702	32 827	2 065 300	1 226 320	1	1	6	1731
166 133 249 662 55 739	44 177 92 190 9 521	291 116 550 783 113 143	4 875 6 094 1 395	6 580 6 887 1 968	45 006 51 806 19 067	9 084 14 452 2 241	430 236 865 240 124 339	256 004 435 449 69 729	4 3 6	5 3 6	15 13 33	174 1741 1742 1743
156 141 106 460	69 802 24 394	329 333 109 635	5 559 3 257	7 233 1 412	47 585 (S)	6 169 2 365	344 575 191 229	190 006 86 407	4 6	6 7	16 20	175 1751 1752
485 655	133 363	366 005	10 908	17 306	164 744	13 306	693 455	395 947	3	4	12	1761
332 104	90 656	486 319	22 581	13 052	106 058	15 107	836 458	428 244	3	4	9	1771
43 456	1 718	(S)	748	6 292	46 297	1 062	73 803	43 177	11	10	38	1781
105 350 84 049 65 456 13 165 107 346 432 576	28 123 2 378 24 474 12 845 10 500 121 809	178 843 105 256 152 668 25 230 75 775 463 831	12 939 2 910 8 688 3 779 4 980 26 064	6 654 1 918 9 252 1 512 3 607 37 056	51 641 18 408 76 744 12 520 32 230 194 837	4 916 3 234 3 978 687 3 508 12 895	305 417 202 590 266 629 46 756 266 297 709 892	232 634 108 834 169 881 38 992 197 318 424 871	4 5 8 14 2 3	3 6 7 5 2 3	17 17 23 (Z) 14 32	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	29 110	32 037	34 777	31 522	(Z)	1	1	1
Proprietors and working partners.....	13 043	7 307	11 488	21 097	1	3	2	2
All employees**	335 521	349 578	475 803	408 403	(Z)	(Z)	(Z)	(Z)
Construction workers:								
March.....	253 941	273 576	395 566	328 115	(Z)	(Z)	(Z)	(Z)
May	264 221	274 761	392 824	344 857	(Z)	(Z)	(Z)	1
August	271 214	283 834	398 724	354 398	1	1	1	1
November.....	255 405	269 001	373 187	344 202	1	1	(Z)	1
Average	261 195	275 293	392 751	343 095	(Z)	(Z)	(Z)	(Z)
Other employees:								
March.....	74 532	76 332	81 812	62 587	1	1	1	1
May	73 719	74 134	(NA)	(NA)	1	1	(NA)	(NA)
August	74 185	74 004	(NA)	(NA)	1	1	(NA)	(NA)
November.....	74 869	72 683	(NA)	(NA)	1	1	(NA)	(NA)
Average	74 326	74 288	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	8 012 865	7 025 641	8 727 378	4 915 923	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	5 605 753	5 038 201	6 711 262	3 820 993	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	2 407 113	1 987 440	2 016 116	1 094 930	(Z)	1	(Z)	(Z)
First-quarter payroll, all employees	1 849 857	1 712 865	2 076 017	1 091 592	(Z)	(Z)	(Z)	(Z)
Fringe benefits, all employees	1 793 518	1 344 917	1 516 641	764 282	1	(Z)	(Z)	(Z)
Legally required expenditures.....	1 318 141	1 025 764	1 151 545	530 999	1	(Z)	(Z)	1
Voluntary expenditures.....	475 377	319 152	365 095	233 284	1	1	(Z)	(Z)
Dollar value of business done	37 655 769	32 227 124	37 498 339	20 576 510	1	1	(Z)	(Z)
Value of construction work	36 731 358	30 712 341	35 936 332	19 442 626	1	(Z)	(Z)	(Z)
Value of construction work subcontracted in from others	8 533 291	6 416 630	7 419 140	3 813 710	2	1	1	1
Other business receipts	924 410	841 862	919 347	1 133 884	2	1	1	1
Net value of construction†	27 465 448	22 700 377	26 550 034	15 278 524	1	(Z)	(Z)	(Z)
Value added††	16 444 347	13 767 035	16 251 869	9 580 999	(Z)	1	(Z)	(Z)
Selected costs.....	21 211 422	17 787 168	20 603 810	10 662 254	1	1	(Z)	1
Materials, components, and supplies	11 337 305	9 241 252	10 553 062	6 190 548	1	1	(Z)	1
Construction work subcontracted out to others	9 265 910	8 011 964	9 386 297	4 164 102	1	1	(Z)	1
Selected power, fuels, and lubricants	608 208	533 952	664 450	307 605	1	1	(Z)	1
Electricity.....	106 332	82 504	96 299	37 590	1	1	1	2
Natural gas	25 984	15 329	24 315	15 901	2	2	2	3
Gasoline and diesel fuel	443 942	399 540	502 123	217 418	1	1	1	1
On highway use.....	299 975	268 252	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use.....	143 967	131 288	(NA)	(NA)	1	1	(NA)	(NA)
Other, including lubricating oils and greases.....	31 950	36 578	41 711	36 705	2	1	1	2
Rental cost for machinery, equipment, and buildings	666 131	596 422	581 476	314 757	2	1	1	1
For machinery and equipment	512 948	425 527	469 051	269 189	2	2	1	1
For buildings.....	153 183	170 895	112 425	45 568	2	2	1	1
Selected purchased services	579 684	520 471	523 904	314 840	1	1	1	2
Communication services	164 239	140 475	123 262	80 089	2	1	1	4
Repairs to buildings and other structures	36 394	30 523	30 818	16 950	4	2	2	2
Repairs to machinery and equipment	379 052	349 471	369 823	217 801	2	1	1	2
Ownership of construction projects:								
Value of construction work	36 731 358	30 712 341	35 936 332	19 442 626	1	(Z)	(Z)	(Z)
Government owned	8 812 771	7 827 000	4 488 499	2 922 710	2	1	2	1
Federal	2 372 845	1 660 951	(NA)	(NA)	3	2	(NA)	(NA)
State and local	6 439 926	6 166 048	(NA)	(NA)	2	1	(NA)	(NA)
Privately owned	27 918 587	22 885 341	31 447 832	16 519 915	1	1	(Z)	(Z)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	4 941 435	4 810 386	1	1
Capital expenditures, other than land -----	549 908	396 591	3	2
New -----	425 402	267 918	3	2
Used -----	124 506	128 672	5	2
Retirements and disposition of depreciable assets -----	260 439	550 004	7	6
End-of-year gross book value of depreciable assets -----	5 230 903	4 656 973	1	1
Depreciation charges during year -----	470 244	556 130	1	1
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	1 516 997	1 126 148	1	2
Capital expenditures, other than land -----	64 064	84 880	5	3
New buildings and other structures -----	50 157	56 355	4	3
Used buildings and other structures -----	13 907	28 524	13	7
Retirements and disposition of depreciable assets -----	20 250	66 830	14	5
End-of-year gross book value of depreciable assets -----	1 560 811	1 144 198	1	2
Depreciation charges during year -----	57 580	120 742	3	2
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	3 424 438	3 684 238	1	1
Capital expenditures, other than land -----	485 844	311 710	3	2
New machinery and equipment, including automobiles and trucks -----	375 245	211 563	3	2
New automobiles and trucks, intended primarily for highway use -----	119 695	88 875	3	3
Used machinery and equipment, including automobiles and trucks -----	110 599	100 147	5	2
Retirements and disposition of depreciable assets -----	240 189	483 174	7	6
End-of-year gross book value of depreciable assets -----	3 670 093	3 512 774	1	1
Depreciation charges during year -----	412 664	435 387	1	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	29 110	(Z)
Value of construction work	36 731 358	1
Establishments with inventories:		
Number	8 584	1
Value of construction work	13 593 071	1
Inventories ¹ :		
End of 1992, materials and supplies	482 893	4
End of 1991, materials and supplies	405 358	5
Establishments with no inventories:		
Number	9 931	2
Value of construction work	14 990 433	1
Establishments not reporting:		
Number	10 594	1
Value of construction work	8 147 854	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	29 110	(S)	6 219	3 363	2 060	592	257	67	21	11
All employees** -----	335 521	32 071	40 294	44 902	60 521	40 412	37 770	23 304	14 310	41 938
Payroll, all employees -----	8 012 865	522 881	739 317	930 381	1 394 135	990 169	1 009 101	731 995	360 728	1 334 159
Dollar value of business done -----	37 655 769	4 178 963	3 915 265	4 509 859	6 697 865	4 859 922	5 263 680	3 488 411	1 560 997	3 180 806
Value of construction work -----	36 731 358	4 131 978	3 842 904	4 463 406	6 615 950	4 809 749	5 146 127	3 423 851	1 502 912	2 794 482
Net value of construction work† -----	27 465 448	2 957 027	2 951 607	3 405 351	4 880 059	3 606 833	3 452 712	2 394 635	1 296 987	2 520 238
Value added†† -----	16 444 347	1 525 293	1 579 480	1 910 253	2 704 452	2 026 442	1 894 139	1 632 230	931 592	2 240 466
Cost of materials, components, supplies, and fuels -----	11 945 512	1 478 720	1 444 487	1 541 552	2 257 522	1 630 564	1 676 126	826 965	423 480	666 096
Cost of construction work subcontracted out to others -----	9 265 910	1 174 950	891 297	1 058 055	1 735 891	1 202 916	1 693 415	1 029 216	205 925	274 244
Rental cost for machinery, equipment, and buildings -----	666 131	54 177	53 031	71 239	109 520	88 899	106 456	87 685	37 417	57 708
Capital expenditures, other than land -----	549 908	52 105	55 472	82 904	96 385	74 029	81 315	27 003	80 695	(D)
End-of-year gross book value of depreciable assets -----	5 230 903	423 761	481 691	518 301	778 260	612 186	667 018	283 208	<u>1 466 479</u>	(D)
1987										
All employees** -----	349 578	(S)	41 097	48 489	69 852	42 948	40 433	21 425	16 112	32 969
Value of construction work -----	30 712 341	(S)	3 076 060	3 567 511	5 636 036	4 347 069	4 105 922	2 340 155	2 525 147	1 633 335
Value added†† -----	13 767 035	(S)	1 397 201	1 750 351	2 585 174	1 784 674	1 777 361	1 026 097	955 332	1 052 300
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	(Z)	2	3	3	2	2	1	(Z)	(Z)	(Z)
Net value of construction work† -----	1	3	3	3	1	1	1	(Z)	(Z)	(Z)
Capital expenditures, other than land -----	3	8	8	15	3	1	(Z)	(Z)	(Z)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	29 110	(S)	(S)	(S)	7 376	5 172	3 657	3 177	1 240	653	514
All employees** -----	335 521	(S)	(S)	(S)	24 084	30 127	34 842	51 671	34 804	33 858	115 867
Payroll, all employees -----	8 012 865	(S)	(S)	(S)	318 260	484 639	657 399	1 140 481	846 596	884 871	3 580 475
Dollar value of business done -----	37 655 769	(S)	(S)	(S)	1 200 355	1 811 611	2 581 068	4 886 104	4 304 811	4 525 424	17 991 886
Value of construction work -----	36 731 358	(S)	(S)	(S)	1 184 636	1 789 903	2 535 273	4 809 541	4 243 563	4 478 189	17 340 418
Net value of construction work† -----	27 465 448	(S)	(S)	(S)	1 063 066	1 573 882	2 156 076	3 868 071	3 176 082	3 360 458	11 944 621
Value added†† -----	16 444 347	(S)	(S)	(S)	650 411	950 208	1 263 028	2 144 526	1 732 359	1 867 354	7 634 862
Cost of materials, components, supplies, and fuels -----	11 945 512	(S)	(S)	(S)	428 375	645 382	938 843	1 800 109	1 504 971	1 540 339	4 961 227
Cost of construction work subcontracted out to others -----	9 265 910	(S)	(S)	(S)	(S)	216 021	379 197	941 469	1 067 481	1 117 731	5 395 797
Rental cost for machinery, equipment, and buildings -----	666 131	(S)	(S)	(S)	21 044	33 560	47 612	76 708	72 809	79 725	329 317
Capital expenditures, other than land -----	549 908	(S)	(S)	(S)	26 140	35 413	44 787	90 394	71 274	62 266	213 933
End-of-year gross book value of depreciable assets -----	5 230 903	(S)	(S)	(S)	195 284	296 613	382 011	619 951	535 382	537 668	2 599 979
1987											
All employees** -----	349 578	(S)	(S)	(S)	(S)	(S)	41 806	52 919	38 906	35 134	104 001
Value of construction work -----	30 712 341	(S)	(S)	(S)	(S)	(S)	2 714 952	4 522 501	3 690 868	3 590 042	12 755 015
Value added†† -----	13 767 035	(S)	(S)	(S)	(S)	(S)	1 327 956	2 109 756	1 730 700	1 571 368	5 110 717
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	(S)	(S)	(S)	3	3	3	2	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	(S)	3	3	3	2	3	3	(Z)
Capital expenditures, other than land -----	3	(S)	(S)	(S)	10	10	9	13	7	2	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	36 731 358	23 541 108	7 189 562	5 023 599	1	1	1	1
Building construction	24 243 420	16 085 759	5 536 870	2 620 790	1	1	2	2
Single-family houses	8 952 713	7 005 605	1 118 740	828 368	2	3	4	4
Single-family houses, detached	8 362 918	6 576 099	1 038 944	747 876	2	3	4	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	589 795	429 507	79 795	80 492	7	8	12	9
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	763 371	381 104	233 531	148 736	5	8	6	6
Other residential buildings, including hotels, motels, and tourist cabins	353 652	133 988	165 803	53 861	8	6	16	10
Office buildings	3 273 657	1 785 565	1 081 690	406 402	2	1	4	2
Other commercial buildings such as stores, restaurants, and automobile service stations	3 310 252	2 007 656	875 748	426 848	2	2	4	3
Industrial buildings and warehouses	2 804 127	1 629 920	735 232	438 976	2	2	3	3
Industrial buildings	2 199 292	1 237 583	603 515	358 194	2	2	3	4
Warehouses	604 836	392 337	131 717	80 782	4	5	6	4
Religious buildings	371 029	219 367	105 886	45 776	3	5	5	6
Educational buildings	1 777 231	1 182 811	499 721	94 698	2	2	5	4
Hospitals and institutional buildings	1 654 800	1 038 609	504 136	112 056	1	1	3	5
Amusement, social, and recreational buildings, indoors	343 676	277 287	47 602	18 786	3	2	12	8
Other nonresidential buildings	638 911	423 847	168 780	46 284	4	3	11	12
Nonbuilding construction	11 510 850	7 455 349	1 652 692	2 402 809	1	1	1	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	2 452 867	1 594 831	586 398	271 638	1	1	2	3
Outdoor swimming pools	214 193	177 201	20 081	16 911	10	10	15	15
Private driveways and parking areas	194 514	120 880	27 672	45 962	8	11	7	9
Bridges, tunnels, and elevated highways	266 941	203 521	40 069	23 351	2	2	7	3
Marine construction	325 068	257 451	22 700	(S)	3	2	15	(S)
Conservation and development construction	269 138	194 397	28 391	46 350	9	12	7	8
Power and communication transmission lines, towers, and related facilities	521 770	371 300	68 304	82 166	3	3	4	5
Sewers, water mains, and related facilities	855 176	627 308	134 790	93 078	3	3	6	15
Sewers, sewer lines, septic systems, and related facilities	511 055	365 049	82 320	63 686	4	3	7	22
Water mains and related facilities	344 120	262 259	52 470	29 391	5	5	6	10
Pipeline construction other than sewer or water lines	935 040	764 537	61 640	108 863	4	3	6	9
Blast furnaces, petroleum refineries, chemical complexes, etc.	3 646 172	1 891 806	388 293	1 366 073	1	1	1	1
Power plants	657 292	502 317	60 444	94 531	1	(Z)	1	3
Power plants, nuclear	192 574	(D)	(D)	(D)	(Z)	(D)	(D)	(D)
Power plants and cogeneration plants, except nuclear	464 718	(D)	(D)	(D)	1	(D)	(D)	(D)
Sewage treatment and water treatment plants	359 084	257 226	74 869	26 989	15	18	7	12
Other nonbuilding construction	813 594	492 574	139 041	181 979	5	7	7	5
Construction work, n.s.k.	977 089	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
1987								
Value of construction work	30 712 341	19 785 245	5 370 352	3 564 781	(Z)	1	1	1
Building construction	19 377 644	13 445 603	3 790 815	1 995 492	1	1	1	2
Single-family houses	5 456 226	4 062 358	833 944	559 924	2	2	3	3
Single-family houses, detached	5 055 687	3 805 191	761 249	489 246	2	2	3	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	400 539	257 166	72 694	70 678	6	8	7	7
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	1 035 794	841 658	99 946	94 188	4	5	7	5
Other residential buildings, including hotels, motels, and tourist cabins	492 293	325 415	93 974	72 902	3	3	5	7
Office buildings	3 443 079	2 292 477	814 020	336 581	1	1	2	2
Other commercial buildings such as stores, restaurants, and automobile service stations	2 538 015	1 695 386	589 011	253 617	2	2	3	3
Industrial buildings and warehouses	2 396 293	1 534 953	418 391	442 948	1	2	2	2
Industrial buildings	1 867 358	1 120 794	344 149	402 415	1	2	2	2
Warehouses	528 934	414 159	74 242	40 533	3	3	5	4
Religious buildings	387 297	262 004	90 052	35 240	3	3	5	5
Educational buildings	1 644 642	1 137 663	426 001	80 977	2	2	4	7
Hospitals and institutional buildings	1 337 573	914 612	340 523	82 436	1	2	3	3
Amusement, social, and recreational buildings, indoors	294 681	250 072	30 109	14 499	2	2	3	6
Other nonresidential buildings	351 751	219 702	84 054	48 008	5	4	13	14
Nonbuilding construction	9 342 733	6 248 945	1 550 327	1 543 461	1	1	1	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	2 993 346	2 011 261	702 384	279 700	1	1	2	3
Outdoor swimming pools	158 255	139 473	6 346	12 434	11	12	17	15
Power and communication transmission lines, towers, and related facilities	395 723	268 242	69 480	58 001	3	3	6	4
Sewers, water mains, and related facilities	1 061 273	869 442	108 599	83 231	2	3	4	5
Sewers, sewer lines, septic systems, and related facilities	571 775	462 315	59 933	49 526	3	3	5	6
Water mains and related facilities	489 497	407 126	48 666	33 704	3	3	4	8
Pipeline construction other than sewer or water lines	284 897	163 310	57 672	63 914	2	2	5	5
Blast furnaces, petroleum refineries, chemical complexes, etc.	1 807 209	951 356	224 947	630 905	1	2	1	1
Power plants	509 203	351 137	30 725	127 339	(Z)	(Z)	4	1
Sewage treatment and water treatment plants	421 660	286 808	111 497	23 354	4	5	3	8
Other nonbuilding construction	1 711 167	1 207 916	238 677	264 583	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	1 991 964	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	29 110	261 195	253 941	264 221	271 214	255 405	(Z)	(Z)	(Z)	(Z)	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	3 773	9 782	9 603	9 990	10 170	9 365	3	4	4	4	4	4
1522	Other residential buildings -----	255	1 745	1 855	1 897	1 851	1 378	13	7	6	8	8	8
1531	Operative builders -----	553	1 857	1 847	1 891	1 923	1 769	8	10	9	11	9	11
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	562	4 495	4 395	4 168	4 568	4 848	8	5	5	5	6	7
1542	Nonresidential buildings, n.e.c. ----	1 694	17 814	16 707	18 030	18 997	17 523	4	2	2	3	3	3
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	576	17 249	16 156	17 358	18 192	17 288	6	2	1	2	2	2
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	56	1 136	1 025	1 132	1 195	1 192	14	7	8	9	7	6
1623	Water, sewer, and utility lines -----	792	14 133	12 966	13 876	15 494	14 195	5	2	2	2	2	2
1629	Heavy construction, n.e.c. -----	1 289	53 842	55 648	55 692	52 812	51 218	5	1	1	1	1	1
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	4 629	26 938	25 948	27 641	28 351	25 813	1	1	1	1	1	1
1721	Painting and paper hanging -----	1 613	10 846	9 406	11 348	11 961	10 668	2	3	3	3	4	3
1731	Electrical work -----	2 899	26 194	25 029	25 819	27 728	26 199	2	1	1	1	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	891	7 292	7 515	7 419	7 384	6 849	3	4	4	5	4	4
1742	Plastering, drywall, and insulation work -----	826	8 681	8 592	8 463	8 995	8 675	5	3	3	3	3	4
1743	Terrazzo, tile, marble, and mosaic work -----	308	1 550	1 473	1 547	1 668	1 510	5	5	5	6	6	6
175	Carpentry and floor work:												
1751	Carpentry -----	1 539	5 645	5 196	5 740	6 024	5 620	4	4	5	5	4	4
1752	Floor laying and other floor work --	417	1 705	(S)	1 497	1 708	1 580	6	6	(S)	7	7	7
1761	Roofing, siding, and sheet metal work -----	1 527	9 840	9 871	9 724	10 358	9 408	3	4	4	4	4	4
1771	Concrete work -----	1 420	11 644	10 982	12 088	12 213	11 291	3	3	4	4	4	3
1781	Water well drilling -----	266	973	954	991	1 017	929	9	11	12	11	10	10
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	293	3 905	3 756	4 043	4 034	3 786	9	4	4	4	5	5
1793	Glass and glazing work -----	335	1 548	1 466	1 593	1 586	1 545	6	6	6	6	6	5
1794	Excavation work -----	464	2 294	2 175	2 221	2 466	2 314	8	8	8	8	8	8
1795	Wrecking and demolition work -----	47	569	636	547	584	508	18	15	21	13	11	12
1796	Installing building equipment, n.e.c. -----	268	3 451	3 942	3 177	3 350	3 334	7	2	3	2	3	3
1799	Special trade contractors, n.e.c. ----	1 815	16 069	14 763	16 330	16 582	16 599	4	3	3	4	4	3

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	11.5	23.9	140.6	.218	.325	.252	.232	.018
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.0	18.0	257.4	.109	.380	.346	.037	.006
1522	Other residential buildings -----	9.3	20.8	247.3	.113	.240	.453	*.068	.006
1531	Operative builders -----	12.1	37.3	2 257.7	.060	.316	.368	.003	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	11.1	24.3	192.2	.176	.321	.401	.075	.020
1542	Nonresidential buildings, n.e.c. -----	15.1	25.4	353.4	.103	.232	.599	.026	.011
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	35.1	21.9	129.1	.199	.418	.196	.194	.031
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	24.6	23.0	155.3	.179	.381	.144	.288	.033
1623	Water, sewer, and utility lines -----	21.3	30.3	137.7	.263	.280	.131	.110	.065
1629	Heavy construction, n.e.c. -----	51.1	30.2	95.7	.386	.269	.125	.127	.026
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	7.8	24.3	118.7	.275	.417	.098	.542	.017
1721	Painting and paper hanging -----	7.7	18.0	61.5	.336	.252	.125	.512	.018
1731	Electrical work -----	11.6	23.9	105.5	.291	.356	.041	.531	.013
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	9.5	16.3	60.8	.310	.375	.100	.656	.011
1742	Plastering, drywall, and insulation work -----	12.7	19.9	81.5	.295	.353	.130	.779	.009
1743	Terrazzo, tile, marble, and mosaic work -----	6.2	19.1	82.9	.284	.434	.074	.881	.011
175	Carpentry and floor work:								
1751	Carpentry -----	4.5	18.0	81.9	.271	.338	.151	.713	.012
1752	Floor laying and other floor work -----	5.7	18.6	132.4	.196	.472	.108	.486	.014
1761	Roofing, siding, and sheet metal work -----	8.4	18.1	115.7	.203	.427	.117	.321	.010
1771	Concrete work -----	9.7	15.2	70.0	.256	.407	.111	.597	.028
1781	Water well drilling -----	4.9	17.0	104.1	.218	.429	.017	(S)	.007
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	15.9	23.7	79.9	.355	.338	.090	.573	.041
1793	Glass and glazing work -----	6.6	21.9	97.2	.321	.559	.016	.700	.019
1794	Excavation work -----	6.0	19.6	97.0	.245	.294	.110	.686	.039
1795	Wrecking and demolition work -----	14.3	22.8	103.2	.262	.224	.219	.430	.064
1796	Installing building equipment, n.e.c. -----	16.7	23.8	90.6	.340	.343	.034	.242	.016
1799	Special trade contractors, n.e.c. -----	10.9	20.6	75.9	.334	.355	.100	.380	.021

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	DALLAS-FORT WORTH, TX CMSA											
15,16, 17	Construction industries	7 346	75 712	1 808 507	10 203 729	7 364 560	4 201 252	3 269 393	2 839 169	109 355	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	3 523	71 169	710 325	465 412	205 471	264 334	244 913	5 512	7	10
1522	Other residential buildings	45	352	7 518	76 827	32 960	20 564	12 636	*43 867	(S)	16	26
1531	Operative builders	215	2 712	91 975	1 635 006	1 100 083	589 102	528 110	534 923	4 641	4	3
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	129	1 045	24 146	167 193	90 642	50 318	41 973	76 552	(S)	10	9
1542	Nonresidential buildings, n.e.c.	484	7 074	203 684	2 146 928	821 181	348 749	484 307	1 325 747	5 136	3	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	118	5 319	125 421	627 130	486 290	249 409	253 589	140 840	19 681	3	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	12	413	10 089	82 929	70 353	34 724	35 652	12 576	3 421	(Z)	(Z)
1623	Water, sewer, and utility lines	162	3 898	128 985	456 272	395 470	262 811	132 872	60 802	8 630	4	3
1629	Heavy construction, n.e.c.	(S)	1 983	46 232	187 327	147 560	78 191	70 276	39 767	5 960	8	8
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 102	10 845	286 792	1 026 451	932 289	543 687	392 102	94 161	12 999	2	2
1721	Painting and paper hanging.....	(S)	2 400	44 012	125 787	109 689	78 014	31 772	16 098	1 013	6	6
1731	Electrical work	810	9 896	254 799	1 057 680	1 032 325	758 983	296 266	25 355	12 691	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work.....	(S)	2 073	35 858	138 550	119 560	58 599	61 454	18 990	(S)	10	10
1742	Plastering, drywall, and insulation work	230	2 640	53 136	201 826	169 159	99 704	70 359	32 667	(S)	5	8
1743	Terrazzo, tile, marble, and mosaic work	74	660	12 909	43 679	37 747	20 780	17 097	*5 931	682	8	5
175	Carpentry and floor work:											
1751	Carpentry	(S)	2 170	43 914	139 634	117 877	75 724	43 513	21 757	1 280	8	9
1752	Floor laying and other floor work ...	(S)	(S)	14 132	64 924	57 499	30 149	32 668	7 425	(S)	(S)	11
1761	Roofing, siding, and sheet metal work	408	3 299	68 956	383 679	326 646	167 934	161 514	57 032	5 943	5	8
1771	Concrete work	(S)	5 015	76 333	282 697	252 058	138 298	113 920	30 639	2 813	4	5
1781	Water well drilling	23	111	2 226	9 799	9 655	5 102	4 586	144	(D)	29	27
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	1 574	38 342	88 115	82 942	62 119	25 101	5 173	1 751	9	7
1793	Glass and glazing work	90	704	18 444	55 191	(D)	25 194	29 280	9 511	567	8	(D)
1794	Excavation work	148	839	17 186	78 943	69 433	46 210	23 448	9 511	2 126	14	12
1795	Wrecking and demolition work	*14	(S)	(S)	8 752	(D)	6 503	2 011	(D)	(D)	(S)	(D)
1796	Installing building equipment, n.e.c. ...	74	1 876	40 483	132 543	128 436	90 228	45 211	4 108	1 492	2	3
1799	Special trade contractors, n.e.c.	(S)	4 399	89 661	275 541	247 412	154 685	95 342	28 129	5 397	11	7
	Dallas, TX PMSA											
15,16, 17	Construction industries	4 803	53 793	1 317 671	7 583 678	5 336 924	3 039 904	2 366 551	2 246 754	69 543	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	2 514	50 858	445 869	286 436	112 134	177 281	159 432	4 137	8	7
1522	Other residential buildings	32	319	6 833	73 396	(D)	(D)	11 583	(D)	(S)	17	(D)
1531	Operative builders	144	2 087	71 259	1 268 955	850 713	451 107	416 576	418 242	(D)	3	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	86	(S)	16 451	106 169	(S)	(S)	(S)	44 641	(S)	(S)	(S)
1542	Nonresidential buildings, n.e.c.	332	5 517	165 918	1 819 114	664 629	263 684	405 471	1 154 486	3 681	4	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	77	3 169	75 371	378 941	271 883	109 865	173 803	107 058	11 263	3	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	101	2 620	97 496	312 401	283 668	205 624	78 141	28 733	3 112	5	3
1629	Heavy construction, n.e.c.	(S)	1 305	33 429	140 672	108 917	55 528	54 130	31 755	5 262	8	10

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	DALLAS-FORT WORTH, TX CMSA—Con.											
	Dallas, TX PMSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	726	8 072	216 672	751 875	685 101	414 604	273 491	66 775	(S)	3	3
1721	Painting and paper hanging-----	(S)	1 748	32 764	99 754	84 899	58 387	26 584	14 855	827	7	7
1731	Electrical work -----	535	7 560	200 744	885 703	866 452	655 989	225 118	19 251	9 662	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	(S)	1 200	18 887	91 121	73 758	31 042	43 162	17 363	(S)	10	10
1742	Plastering, drywall, and insulation work -----	155	1 849	36 715	132 599	104 051	61 730	42 847	28 548	(S)	5	6
1743	Terrazzo, tile, marble, and mosaic work -----	51	491	9 795	31 504	(S)	15 579	(S)	*4 358	550	8	(S)
175	Carpentry and floor work:											
1751	Carpentry -----	(S)	1 197	24 194	83 148	70 177	41 193	30 041	12 971	679	11	13
1752	Floor laying and other floor work ---	(S)	(S)	12 417	57 348	50 682	26 789	29 079	*6 666	(S)	(S)	12
1761	Roofing, siding, and sheet metal work -----	263	2 155	42 621	220 280	195 321	103 532	93 315	24 958	1 688	6	8
1771	Concrete work -----	(S)	3 513	51 559	189 910	164 567	89 012	75 632	25 343	2 103	5	5
1781	Water well drilling -----	*16	90	1 792	(D)	(D)	3 838	(D)	(D)	(D)	36	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	(S)	1 153	27 572	62 624	57 741	43 381	15 361	4 883	1 144	11	9
1793	Glass and glazing work -----	50	420	12 235	34 805	(D)	15 838	18 378	(D)	(S)	12	(D)
1794	Excavation work -----	(S)	460	10 771	47 770	40 834	27 580	13 447	6 936	1 447	18	15
1795	Wrecking and demolition work -----	*13	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ---	45	1 728	37 749	119 046	116 945	79 462	37 981	2 101	960	(Z)	(Z)
1799	Special trade contractors, n.e.c. -----	(S)	2 931	56 622	165 104	148 036	94 244	56 014	17 067	1 906	16	9
	Fort Worth-Arlington, TX PMSA											
15,16, 17	Construction industries -----	2 544	21 919	490 836	2 620 051	2 027 636	1 161 348	902 842	592 415	39 812	2	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	(S)	(S)	20 311	264 456	178 976	93 337	87 053	85 480	1 375	(S)	25
1522	Other residential buildings -----	*13	*33	685	3 431	(D)	(D)	1 053	(D)	20	45	(D)
1531	Operative builders -----	71	625	20 716	366 051	249 370	137 996	111 535	116 680	(D)	14	7
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	(S)	323	7 695	61 025	29 114	17 225	12 837	31 911	(S)	13	7
1542	Nonresidential buildings, n.e.c. -----	152	1 557	37 766	327 814	156 553	85 064	78 837	171 261	1 455	7	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	42	2 151	50 050	248 189	214 407	139 545	79 786	33 782	8 418	5	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	61	1 277	31 489	143 871	111 802	57 187	54 731	32 069	5 518	7	5
1629	Heavy construction, n.e.c. -----	69	678	12 803	46 655	38 642	22 664	16 147	8 012	698	18	10
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	375	2 773	70 120	274 575	247 189	129 083	118 611	27 386	4 864	5	4
1721	Painting and paper hanging-----	136	652	11 249	26 034	24 790	19 627	5 188	1 243	186	14	12
1731	Electrical work -----	275	2 336	54 056	171 977	165 873	102 994	71 148	6 104	3 029	5	6
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	61	873	16 972	47 429	45 802	27 557	18 292	1 627	500	19	21
1742	Plastering, drywall, and insulation work -----	76	(S)	16 421	69 227	65 108	37 975	(S)	4 119	(S)	(S)	17
1743	Terrazzo, tile, marble, and mosaic work -----	23	170	3 114	12 175	10 602	5 201	5 432	1 573	132	23	14
175	Carpentry and floor work:											
1751	Carpentry -----	(S)	973	19 720	56 486	47 700	34 531	13 472	(S)	601	12	11
1752	Floor laying and other floor work ---	27	93	1 715	7 576	6 817	3 360	*3 588	759	36	24	28
1761	Roofing, siding, and sheet metal work -----	145	1 144	26 334	163 399	131 325	64 402	68 199	32 074	4 255	10	16
1771	Concrete work -----	(S)	1 502	24 774	92 787	87 491	49 286	38 288	5 296	710	9	10

CONSTRUCTION—GEOGRAPHIC AREA SERIES

TEXAS TX—15

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	DALLAS-FORT WORTH, TX CMSA—Con.											
	Fort Worth–Arlington, TX PMSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1781	Water well drilling	7	22	434	(D)	(D)	1 264	(D)	(D)	(D)	(Z)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	28	420	10 770	25 491	25 201	18 737	9 740	291	607	12	13
1793	Glass and glazing work	39	284	6 210	20 386	(D)	9 356	10 902	(D)	309	9	(D)
1794	Excavation work	79	379	6 416	31 173	28 598	18 630	10 001	2 575	680	21	18
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1796	Installing building equipment, n.e.c.	29	147	2 734	*13 497	11 491	*10 766	*7 230	*2 007	*532	24	36
1799	Special trade contractors, n.e.c.	142	1 468	33 040	110 437	99 376	60 441	39 328	11 061	3 491	10	11
	HOUSTON-GALVESTON-BRAZORIA, TX CMSA											
15,16,17	Construction industries	6 291	119 211	3 205 270	12 654 430	9 514 180	6 042 982	4 042 609	3 140 250	177 366	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	809	3 680	71 088	597 385	353 523	154 940	208 896	243 863	3 675	7	7
1522	Other residential buildings	57	1 202	27 960	229 221	112 616	50 218	62 646	116 605	1 200	9	6
1531	Operative builders	138	2 340	104 526	1 747 355	1 096 891	660 472	496 002	650 464	25 412	3	3
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	120	1 766	53 765	246 403	148 617	67 675	94 538	97 787	(S)	6	7
1542	Nonresidential buildings, n.e.c.	399	7 915	196 194	1 782 637	677 413	290 530	400 977	1 105 224	7 448	5	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	4 676	103 442	523 380	425 582	208 453	217 997	97 798	14 452	2	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	11	291	8 617	33 316	(D)	17 576	12 838	(D)	824	11	(D)
1623	Water, sewer, and utility lines	156	4 855	165 252	581 259	523 375	349 517	176 425	57 884	17 223	3	2
1629	Heavy construction, n.e.c.	(S)	40 117	1 268 045	2 878 004	2 535 260	2 139 973	804 864	342 744	38 041	(Z)	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	(S)	10 059	280 455	959 613	847 819	442 916	414 210	111 794	10 678	2	2
1721	Painting and paper hanging	375	4 931	95 798	282 087	248 912	175 033	74 660	33 175	3 423	4	7
1731	Electrical work	624	9 183	226 806	729 009	682 940	395 430	293 572	46 069	8 538	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	152	2 662	49 811	146 366	131 221	81 659	49 645	15 145	1 395	6	9
1742	Plastering, drywall, and insulation work	(S)	3 833	85 040	273 101	233 759	139 130	95 310	39 342	2 619	5	4
1743	Terrazzo, tile, marble, and mosaic work	89	674	14 749	51 127	48 421	26 237	22 407	*2 706	876	12	13
175	Carpentry and floor work:											
1751	Carpentry	(S)	1 700	33 829	138 110	121 295	74 324	49 150	16 816	(S)	8	16
1752	Floor laying and other floor work	90	660	14 552	79 552	70 740	35 613	37 861	8 812	472	13	13
1761	Roofing, siding, and sheet metal work	305	2 836	58 372	287 632	251 475	121 687	132 482	36 157	3 387	4	6
1771	Concrete work	260	3 577	55 736	206 935	183 367	101 662	81 943	23 569	3 181	8	7
1781	Water well drilling	32	207	5 080	(D)	20 196	12 356	8 144	(D)	1 881	3	(Z)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	73	1 744	45 948	145 701	127 319	74 767	59 234	18 382	4 154	6	5
1793	Glass and glazing work	93	571	13 255	41 143	40 781	19 721	23 299	*362	(S)	15	16
1794	Excavation work	97	624	10 891	46 352	40 802	28 237	13 179	5 550	1 485	15	10
1795	Wrecking and demolition work	13	259	7 936	(D)	(D)	15 039	6 092	(D)	828	(Z)	(D)
1796	Installing building equipment, n.e.c.	57	1 060	34 372	88 573	85 749	58 418	27 777	2 824	895	8	3
1799	Special trade contractors, n.e.c.	418	7 789	173 749	508 018	454 841	301 402	178 462	53 177	19 276	4	6

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.											
	Brazoria, TX PMSA											
15,16,17	Construction industries	(S)	8 292	221 467	534 264	466 641	331 584	143 859	67 623	7 611	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	144	*4 077	(S)	11 167	5 635	(S)	(S)	(S)	27	25
1522	Other residential buildings	—	—	—	—	—	—	—	—	—	—	—
1531	Operative builders	—	—	—	—	—	—	—	—	—	—	—
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	125	(D)	(D)	(D)	5 043	(D)	(D)	203	(Z)	(D)
1542	Nonresidential buildings, n.e.c.	21	403	(S)	(S)	(S)	(S)	(S)	22 049	(D)	12	(S)
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	(S)	172	3 952	10 365	(D)	6 010	2 836	(D)	(D)	(Z)	(D)
1629	Heavy construction, n.e.c.	21	3 001	86 032	159 514	145 143	118 011	28 479	14 371	930	(Z)	(Z)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	(S)	1 587	49 219	109 081	99 664	68 200	31 471	9 417	1 869	2	6
1721	Painting and paper hanging	14	542	11 507	27 039	(D)	20 502	6 534	(D)	(D)	11	(D)
1731	Electrical work	(S)	516	13 251	25 627	25 439	16 846	8 944	(S)	336	3	5
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	(S)	1 535	(S)	(D)	3 203	(S)	(D)	110	(S)	(D)
1742	Plastering, drywall, and insulation work	10	123	(D)	10 950	8 047	4 471	3 593	*2 903	(D)	16	18
1743	Terrazzo, tile, marble, and mosaic work	—	—	—	—	—	—	—	—	—	—	—
175	Carpentry and floor work:											
1751	Carpentry	11	31	364	1 735	1 493	1 001	494	242	(D)	(Z)	(Z)
1752	Floor laying and other floor work	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1761	Roofing, siding, and sheet metal work	(S)	170	1 590	5 967	5 231	(S)	1 873	*736	(S)	26	19
1771	Concrete work	9	69	1 024	2 443	(D)	1 428	(D)	(D)	(D)	36	(D)
1781	Water well drilling	7	(D)	(D)	(D)	(D)	2 289	1 029	72	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	(S)	(S)	(S)
1793	Glass and glazing work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1794	Excavation work	*5	43	1 004	(D)	6 014	2 109	(D)	(D)	290	23	15
1795	Wrecking and demolition work	1	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	3	30	(D)	(D)	(D)	1 208	(D)	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c.	(S)	(D)	(D)	56 421	(D)	43 479	(D)	(D)	(D)	(D)	(D)
	Galveston—Texas City, TX PMSA											
15,16,17	Construction industries	338	2 875	71 484	286 893	231 890	148 032	86 817	55 004	6 311	3	5
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	177	3 434	32 551	23 526	14 448	9 787	9 025	(S)	25	23
1522	Other residential buildings	—	—	—	—	—	—	—	—	—	—	—
1531	Operative builders	*11	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	(S)	(S)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	239	(D)	(D)	(D)	11 090	(D)	(D)	(S)	10	(D)
1542	Nonresidential buildings, n.e.c.	5	118	3 341	22 557	10 595	8 432	2 163	11 962	(D)	32	24

CONSTRUCTION—GEOGRAPHIC AREA SERIES

TEXAS TX—17

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.											
	Galveston—Texas City, TX PMSA—Con.											
15,16,17	Construction industries—Con.											
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1629	Heavy construction, n.e.c.	33	718	20 219	55 929	52 462	40 387	12 213	3 467	2 737	5	5
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	59	284	6 548	21 700	21 048	11 949	(S)	(S)	(S)	12	12
1721	Painting and paper hanging	(S)	223	4 321	12 619	(D)	8 681	2 925	(D)	(D)	1	(D)
1731	Electrical work	38	291	8 034	27 005	26 931	18 561	8 396	74	266	8	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	30	349	721	721	544	177	—	—	(Z)	(Z)
1742	Plastering, drywall, and insulation work	(S)	(S)	(D)	(S)	(S)	2 146	(S)	54	(D)	(S)	(S)
1743	Terrazzo, tile, marble, and mosaic work	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(S)
1752	Floor laying and other floor work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1761	Roofing, siding, and sheet metal work	30	179	4 640	18 826	16 863	8 372	8 516	1 963	131	9	5
1771	Concrete work	6	54	1 206	5 334	(D)	2 706	(D)	(D)	(D)	(Z)	(D)
1781	Water well drilling	—	—	—	—	—	—	—	—	—	—	—
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	—	—	—	—	—	—	—	—	—	—	—
1793	Glass and glazing work	3	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1794	Excavation work	(S)	(S)	*657	(D)	(D)	(S)	(D)	*209	*55	(S)	(D)
1795	Wrecking and demolition work	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c.	5	(S)	(D)	(D)	(D)	(S)	(D)	(D)	(D)	(S)	(D)
1799	Special trade contractors, n.e.c.	6	(D)	(D)	(S)	(D)	(S)	(D)	(D)	(D)	(D)	(D)
	Houston, TX PMSA											
15,16,17	Construction industries	5 660	108 044	2 912 319	11 833 272	8 815 649	5 563 366	3 811 933	3 017 623	163 444	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	708	3 359	63 577	547 748	318 829	134 857	193 505	228 919	3 319	8	8
1522	Other residential buildings	57	1 202	27 960	229 221	112 616	50 218	62 646	116 605	1 200	9	6
1531	Operative builders	127	2 305	103 922	1 718 613	1 083 481	655 772	487 292	635 132	25 412	3	3
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	104	1 402	44 503	204 829	119 909	51 542	81 289	84 920	(S)	7	8
1542	Nonresidential buildings, n.e.c.	372	7 393	183 518	1 702 292	631 079	261 855	383 165	1 071 213	6 015	5	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	4 589	101 509	(D)	(D)	(D)	(D)	(D)	(D)	2	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	11	291	8 617	33 316	(D)	17 576	12 838	(D)	824	11	(D)
1623	Water, sewer, and utility lines	145	4 663	160 816	568 646	(D)	342 213	172 658	(D)	(D)	3	(D)
1629	Heavy construction, n.e.c.	(S)	36 398	1 161 794	2 662 561	2 337 655	1 981 575	764 172	324 906	34 374	(Z)	1

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.											
	Houston, TX PMSA—Con.											
	Construction industries—Con.											
	Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning	(S)	8 188	224 689	828 831	727 107	362 767	373 638	101 725	8 296	2	2
	1721 Painting and paper hanging	348	4 166	79 970	242 428	210 760	145 850	65 202	31 668	2 357	5	8
	1731 Electrical work	555	8 376	205 521	676 377	630 570	360 023	276 231	45 807	7 936	3	2
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work	141	2 565	47 927	140 467	(D)	77 912	47 543	(D)	1 285	7	(D)
	1742 Plastering, drywall, and insulation work	(S)	3 651	81 271	258 501	222 116	132 513	90 258	36 385	2 440	5	4
	1743 Terrazzo, tile, marble, and mosaic work	87	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	175 Carpentry and floor work:											
	1751 Carpentry	(S)	1 565	31 731	128 559	112 751	70 177	44 190	15 808	(S)	8	17
	1752 Floor laying and other floor work ...	87	653	(D)	(D)	70 410	35 406	(D)	(D)	(D)	13	13
	1761 Roofing, siding, and sheet metal work	259	2 488	52 142	262 839	229 381	109 947	122 093	33 458	3 123	4	7
	1771 Concrete work	245	3 454	53 506	199 158	175 940	97 528	78 641	23 218	(D)	8	8
	1781 Water well drilling	25	(D)	(D)	17 866	(D)	10 067	7 115	(D)	(D)	(D)	(D)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection	66	1 725	45 712	145 402	127 020	74 539	59 163	18 382	4 118	6	5
	1793 Glass and glazing work	88	550	12 662	39 854	39 492	19 325	22 286	*362	(D)	16	17
	1794 Excavation work	77	548	9 229	37 014	(D)	25 107	8 500	(D)	1 140	17	(D)
	1795 Wrecking and demolition work	12	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1796 Installing building equipment, n.e.c. ...	49	863	28 031	75 440	(D)	49 947	23 051	(D)	799	9	(D)
	1799 Special trade contractors, n.e.c.	390	6 595	143 042	448 792	397 090	255 543	160 487	51 701	18 921	5	7
	AUSTIN—SAN MARCOS, TX MSA											
	Construction industries	1 746	16 309	342 306	2 073 183	1 508 839	762 469	756 775	564 345	29 481	2	2
	15 Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses	(S)	1 066	18 153	204 015	139 274	56 346	83 949	64 741	(S)	11	20
	1522 Other residential buildings	*20	*95	*1 636	*7 383	*4 121	*2 052	*2 087	*3 262	130	65	47
	1531 Operative builders	34	489	16 051	356 479	230 625	72 886	157 912	125 854	696	9	4
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1542 Nonresidential buildings, n.e.c.	93	1 806	47 046	372 934	169 402	81 780	87 760	203 532	2 281	4	7
	16 Heavy construction other than building construction—contractors:											
	1611 Highway and street construction	44	1 529	33 058	192 264	144 752	71 616	73 572	47 513	5 517	5	4
	162 Heavy construction, except highway:											
	1622 Bridge, tunnel, and elevated highway construction	*8	*103	*1 627	*8 099	*7 342	*4 429	*2 913	*757	*132	42	50
	1623 Water, sewer, and utility lines	45	939	19 303	150 973	131 636	77 277	54 879	*19 337	7 276	8	7
	1629 Heavy construction, n.e.c.	(S)	(S)	12 028	66 610	52 046	30 994	22 058	*14 565	612	(S)	19
	17 Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning	285	2 245	51 071	213 616	188 131	97 717	91 706	25 485	2 457	5	3
	1721 Painting and paper hanging	(S)	698	14 154	36 719	35 001	25 435	9 730	1 717	470	9	15
	1731 Electrical work	157	1 529	38 449	121 592	118 963	69 427	49 801	2 629	1 837	5	5
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work	55	437	5 717	22 414	17 984	9 311	8 990	*4 430	712	13	14
	1742 Plastering, drywall, and insulation work	(S)	780	15 150	48 151	43 022	24 674	19 075	(S)	686	12	8
	1743 Terrazzo, tile, marble, and mosaic work	13	103	1 635	5 011	4 749	2 634	2 126	(S)	52	11	12
	175 Carpentry and floor work:											
	1751 Carpentry	(S)	435	7 822	34 474	23 605	12 847	10 804	10 869	(S)	18	20
	1752 Floor laying and other floor work ...	45	290	4 911	24 318	21 042	8 869	13 147	3 276	71	15	20
	1761 Roofing, siding, and sheet metal work	84	740	10 366	44 301	41 233	28 736	12 600	3 067	*766	23	10
	1771 Concrete work	(S)	791	12 237	57 318	45 446	26 355	19 159	11 872	1 046	13	17

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TEXAS TX—19

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

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SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17 1781 179 1791 1793 1794 1795 1796 1799	AUSTIN—SAN MARCOS, TX MSA—Con.											
	Construction industries—Con.											
	Special trade contractors—Con.											
	Water well drilling	8	(D)	(D)	2 448	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Miscellaneous special trade contractors:											
	Structural steel erection	*22	110	(S)	7 057	6 114	(S)	2 282	*943	*53	34	33
	Glass and glazing work	9	131	2 932	(D)	9 168	5 124	4 927	(D)	*136	5	7
	Excavation work	32	246	4 873	16 745	14 332	8 887	5 522	*2 413	927	20	24
	Wrecking and demolition work	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Installing building equipment, n.e.c. .	12	220	4 416	11 517	(D)	5 841	5 587	(D)	78	1	(D)
	Special trade contractors, n.e.c.	84	648	11 417	34 958	33 324	23 297	10 359	1 634	900	17	20
	SAN ANTONIO, TX MSA											
	Construction industries	2 166	30 050	702 500	2 953 852	2 217 933	1 432 349	814 910	735 918	53 106	1	2
	Building construction—General contractors and operative builders:											
	General contractors, residential buildings:											
	Single-family houses	336	1 458	24 145	209 722	142 199	71 219	74 047	67 523	1 939	9	10
	Other residential buildings	*22	*134	*1 981	*10 660	*8 643	*6 583	*2 117	*2 017	*257	46	52
	Operative builders	(S)	412	13 064	122 517	50 960	32 697	(S)	71 557	(D)	11	37
	General contractors, nonresidential buildings:											
	Industrial buildings and warehouses	(S)	319	6 114	49 063	25 890	13 468	*13 944	23 173	330	24	25
	Nonresidential buildings, n.e.c.	166	2 240	49 090	522 636	205 882	80 955	128 136	316 755	2 935	7	6
	Heavy construction other than building construction—contractors:											
	Highway and street construction	46	1 867	36 710	178 434	133 628	76 099	64 349	44 806	7 864	4	2
	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction	4	(D)	(D)	3 961	(D)	2 220	(D)	(D)	(D)	(D)	(D)
	Water, sewer, and utility lines	23	(D)	8 168	27 250	23 032	15 034	8 010	4 218	914	(D)	8
	Heavy construction, n.e.c.	44	(D)	(D)	914 434	804 549	649 640	159 012	109 884	27 128	(D)	(Z)
	Special trade contractors:											
	Plumbing, heating, and air-conditioning	304	2 489	54 620	219 136	193 755	108 480	86 829	25 381	1 606	4	3
	Painting and paper hanging	161	1 123	16 367	57 145	44 880	31 952	12 935	12 265	189	15	15
	Electrical work	194	2 365	52 387	167 420	162 900	94 574	70 231	4 521	2 066	4	4
	Masonry, stone work, tile setting, and plastering:											
	Masonry, stone setting, and other stone work	(S)	485	6 793	26 457	25 789	14 184	(S)	(S)	(S)	13	21
	Plastering, drywall, and insulation work	66	612	(D)	40 004	36 083	23 109	12 985	*3 921	703	15	13
	Terrazzo, tile, marble, and mosaic work	(S)	159	2 354	8 742	(D)	3 327	5 273	(D)	250	3	(D)
	Carpentry and floor work:											
	Carpentry	(S)	526	7 840	32 380	27 671	16 213	11 691	4 709	(S)	12	17
	Floor laying and other floor work ...	27	224	4 625	31 301	27 808	16 039	11 951	*3 493	226	24	21
	Roofing, siding, and sheet metal work	131	1 232	23 548	113 773	96 033	54 096	41 985	17 740	1 868	17	19
	Concrete work	(S)	1 030	17 538	79 276	67 672	37 595	30 233	11 603	983	15	19
	Water well drilling	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Miscellaneous special trade contractors:											
	Structural steel erection	(S)	379	7 243	24 570	22 236	13 629	8 946	2 334	163	10	11
	Glass and glazing work	22	186	4 197	11 321	11 301	8 210	5 727	*20	462	5	5
	Excavation work	21	62	1 209	4 050	3 408	2 151	1 257	(S)	(D)	26	24
	Wrecking and demolition work	3	62	1 190	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
	Installing building equipment, n.e.c. .	24	216	6 202	17 981	17 174	12 875	4 299	*807	176	11	11
	Special trade contractors, n.e.c.	132	1 308	20 982	75 541	68 544	43 686	27 900	6 996	1 751	11	12

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings.

Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
- **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
- **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- **Outdoor swimming pools.** Includes wading pools and reflecting pools.
- **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
- **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
- **Fencing.** Includes all types of fencing.
- **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
- **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
- **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- **Harbor and port facilities.** Includes docks, piers, and wharves.
- **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
- **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
- **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
- **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
- **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

Nonbuilding construction:

- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Appendix D. Metropolitan Areas

[Titles and definitions shown for MSA's, CMSA's, and PMSA's are those established by the Office of Management and Budget as of June 30, 1993]

Abilene, TX MSA

Taylor County, TX

Akron, OH PMSA—see Cleveland–Akron, OH CMSA

Albany, GA MSA

Dougherty County, GA
Lee County, GA

Albany–Schenectady–Troy, NY MSA

Albany County, NY
Montgomery County, NY
Rensselaer County, NY
Saratoga County, NY
Schenectady County, NY
Schoharie County, NY

Albuquerque, NM MSA

Bernalillo County, NM
Sandoval County, NM
Valencia County, NM

Alexandria, LA MSA

Rapides Parish, LA

Allentown–Bethlehem–Easton, PA MSA

Carbon County, PA
Lehigh County, PA
Northampton County, PA

Altoona, PA MSA

Blair County, PA

Amarillo, TX MSA

Potter County, TX
Randall County, TX

Anchorage, AK MSA

Anchorage Borough, AK

Ann Arbor, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Anniston, AL MSA

Calhoun County, AL

Appleton–Oshkosh–Neenah, WI MSA

Calumet County, WI
Outagamie County, WI
Winnebago County, WI

Asheville, NC MSA

Buncombe County, NC
Madison County, NC

Athens, GA MSA

Clarke County, GA
Madison County, GA
Oconee County, GA

Atlanta, GA MSA

Barrow County, GA
Bartow County, GA

Atlanta, GA MSA—Con.

Carroll County, GA
Cherokee County, GA
Clayton County, GA
Cobb County, GA
Coweta County, GA
DeKalb County, GA
Douglas County, GA
Fayette County, GA
Forsyth County, GA
Fulton County, GA
Gwinnett County, GA
Henry County, GA
Newton County, GA
Paulding County, GA
Pickens County, GA
Rockdale County, GA
Spalding County, GA
Walton County, GA

Atlantic–Cape May, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Augusta–Aiken, GA–SC MSA

Columbia County, GA
McDuffie County, GA
Richmond County, GA
Aiken County, SC
Edgefield County, SC

Austin–San Marcos, TX MSA

Bastrop County, TX
Caldwell County, TX
Hays County, TX
Travis County, TX
Williamson County, TX

Bakersfield, CA MSA

Kern County, CA

Baltimore, MD PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA

Bangor, ME MSA

Penobscot County, ME (part)
Bangor city, ME
Brewer city, ME
Eddington town, ME
Glenburn town, ME
Hampden town, ME
Hermon town, ME
Holden town, ME
Kenduskeag town, ME
Milford town, ME
Old Town city, ME
Orono town, ME
Orrington town, ME
Penobscot Indian Island Reservation, ME
Veazie town, ME

Bangor, ME MSA—Con.

Waldo County, ME (part)
Winterport town, ME

Barnstable–Yarmouth, MA MSA

Barnstable County, MA (part)
Barnstable city, MA
Brewster town, MA
Chatham town, MA
Dennis town, MA
Eastham town, MA
Harwich town, MA
Mashpee town, MA
Orleans town, MA
Sandwich town, MA
Yarmouth town, MA

Baton Rouge, LA MSA

Ascension Parish, LA
East Baton Rouge Parish, LA
Livingston Parish, LA
West Baton Rouge Parish, LA

Beaumont–Port Arthur, TX MSA

Hardin County, TX
Jefferson County, TX
Orange County, TX

Bellingham, WA MSA

Whatcom County, WA

Benton Harbor, MI MSA

Berrien County, MI

Bergen–Passaic, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Billings, MT MSA

Yellowstone County, MT

Biloxi–Gulfport–Pascagoula, MS MSA

Hancock County, MS
Harrison County, MS
Jackson County, MS

Binghamton, NY MSA

Broome County, NY
Tioga County, NY

Birmingham, AL MSA

Blount County, AL
Jefferson County, AL
St. Clair County, AL
Shelby County, AL

Bismarck, ND MSA

Burleigh County, ND
Morton County, ND

Bloomington, IN MSA

Monroe County, IN

Bloomington–Normal, IL MSA

McLean County, IL

Boise City, ID MSA

Ada County, ID

Canyon County, ID

**Boston, MA–NH PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA**

Boston, MA–NH PMSA

Bristol County, MA (part)

Berkley town, MA

Dighton town, MA

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Essex town, MA

Gloucester city, MA

Hamilton town, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Manchester town, MA

Marblehead town, MA

Middleton town, MA

Nahant town, MA

Newbury town, MA

Newburyport city, MA

Peabody city, MA

Rockport town, MA

Rowley town, MA

Salem city, MA

Salisbury town, MA

Saugus town, MA

Swampscott town, MA

Topsfield town, MA

Wenham town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Holliston town, MA

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Lincoln town, MA

Littleton town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Sherborn town, MA

Shirley town, MA

Somerville city, MA

Stoneham town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Middlesex County, MA (part)

Stow town, MA

Sudbury town, MA

Townsend town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

Winchester town, MA

Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Cohasset town, MA

Dedham town, MA

Dover town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Millis town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Plainville town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Norwell town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

Suffolk County, MA

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA

Blackstone town, MA

Bolton town, MA

Harvard town, MA

Hopedale town, MA

Lancaster town, MA

Mendon town, MA

Milford town, MA

Millville town, MA

Southborough town, MA

Upton town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Rockingham County, NH (part)

Seabrook town, NH

South Hampton town, NH

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Halifax town, MA

Hanson town, MA

Lakeville town, MA

Middleborough town, MA

Plympton town, MA

West Bridgewater town, MA

Whitman town, MA

Fitchburg–Leominster, MA PMSA

Middlesex County, MA (part)

Ashby town, MA

Worcester County, MA (part)

Ashburnham town, MA

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lunenburg town, MA

Templeton town, MA

Westminster town, MA

Winchendon town, MA

Lawrence, MA–NH PMSA

Essex County, MA (part)

Andover town, MA

Boxford town, MA

Georgetown town, MA

Groveland town, MA

Haverhill city, MA

Lawrence city, MA

Merrimac town, MA

Methuen city, MA

North Andover town, MA

West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH

Chester town, NH

Danville town, NH

Derry town, NH

Fremont town, NH

Hampstead town, NH

Kingston town, NH

Newton town, NH

Plaistow town, NH

Raymond town, NH

Salem town, NH

Sandown town, NH

Windham town, NH

Lowell, MA–NH PMSA

Middlesex County, MA (part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Dunstable town, MA

Groton town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Tyngsborough town, MA

Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Manchester, NH PMSA
 Hillsborough County, NH (part)
 Bedford town, NH
 Goffstown town, NH
 Manchester city, NH
 Weare town, NH
 Merrimack County, NH (part)
 Allentown town, NH
 Hooksett town, NH
 Rockingham County, NH (part)
 Auburn town, NH
 Candia town, NH
 Londonderry town, NH
 Nashua, NH PMSA
 Hillsborough County, NH (part)
 Amherst town, NH
 Brookline town, NH
 Greenville town, NH
 Hollis town, NH
 Hudson town, NH
 Litchfield town, NH
 Mason town, NH
 Merrimack town, NH
 Milford town, NH
 Mont Vernon town, NH
 Nashua city, NH
 New Ipswich town, NH
 Wilton town, NH
 New Bedford, MA PMSA
 Bristol County, MA (part)
 Acushnet town, MA
 Dartmouth town, MA
 Fairhaven town, MA
 Freetown town, MA
 New Bedford city, MA
 Plymouth County, MA (part)
 Marion town, MA
 Mattapoisett town, MA
 Rochester town, MA
 Portsmouth–Rochester, NH–ME PMSA
 York County, ME (part)
 Berwick town, ME
 Eliot town, ME
 Kittery town, ME
 South Berwick town, ME
 York town, ME
 Rockingham County, NH (part)
 Brentwood town, NH
 East Kingston town, NH
 Epping town, NH
 Exeter town, NH
 Greenland town, NH
 Hampton town, NH
 Hampton Falls town, NH
 Kensington town, NH
 New Castle town, NH
 Newfields town, NH
 Newington town, NH
 Newmarket town, NH
 North Hampton town, NH
 Portsmouth city, NH
 Rye town, NH
 Stratham town, NH
 Strafford County, NH (part)
 Barrington town, NH
 Dover city, NH
 Durham town, NH
 Farmington town, NH
 Lee town, NH
 Madbury town, NH
 Milton town, NH
 Rochester city, NH
 Rollinsford town, NH
 Somersworth city, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Worcester, MA–CT PMSA
 Windham County, CT (part)
 Thompson town, CT
 Hampden County, MA (part)
 Holland town, MA
 Worcester County, MA (part)
 Auburn town, MA
 Barre town, MA
 Boylston town, MA
 Brookfield town, MA
 Charlton town, MA
 Clinton town, MA
 Douglas town, MA
 Dudley town, MA
 East Brookfield town, MA
 Grafton town, MA
 Holden town, MA
 Leicester town, MA
 Millbury town, MA
 Northborough town, MA
 Northbridge town, MA
 North Brookfield town, MA
 Oakham town, MA
 Oxford town, MA
 Paxton town, MA
 Princeton town, MA
 Rutland town, MA
 Shrewsbury town, MA
 Southbridge town, MA
 Spencer town, MA
 Sterling town, MA
 Sturbridge town, MA
 Sutton town, MA
 Uxbridge town, MA
 Webster town, MA
 Westborough town, MA
 West Boylston town, MA
 West Brookfield town, MA
 Worcester city, MA

**Boulder–Longmont, CO PMSA—see
Denver–Boulder–Greeley, CO CMSA****Brazoria, TX PMSA—see Houston–
Galveston–Brazoria, TX CMSA****Bremerton, WA PMSA—see Seattle–
Tacoma–Bremerton, WA CMSA****Bridgeport, CT PMSA—see New York–
Northern New Jersey–Long Island, NY–
NJ–CT–PA CMSA****Brockton, MA PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Brownsville–Harlingen–San Benito, TX MSA**
Cameron County, TX**Bryan–College Station, TX MSA**
Brazos County, TX**Buffalo–Niagara Falls, NY MSA**
Erie County, NY
Niagara County, NY

Burlington, VT MSA
 Chittenden County, VT (part)
 Burlington city, VT
 Charlotte town, VT
 Colchester town, VT
 Essex Junction village, VT
 Essex town balance, VT
 Hinesburg town, VT
 Jericho town, VT
 Jericho village, VT
 Milton town, VT
 Milton village, VT
 Richmond town, VT
 St. George town, VT
 Shelburne town, VT

Burlington, VT MSA—Con.
 Chittenden County, VT (part)—Con.
 South Burlington city, VT
 Williston town, VT
 Winooski city, VT
 Franklin County, VT (part)
 Fairfax town, VT
 Georgia town, VT
 St. Albans city, VT
 St. Albans town, VT
 Swanton town, VT
 Swanton village, VT
 Grand Isle County, VT (part)
 Grand Isle town, VT
 South Hero town, VT

Canton–Massillon, OH MSA
Carroll County, OH
Stark County, OH**Casper, WY MSA**
Natrona County, WY**Cedar Rapids, IA MSA**
Linn County, IA**Champaign–Urbana, IL MSA**
Champaign County, IL**Charleston–North Charleston, SC MSA**
Berkeley County, SC
Charleston County, SC
Dorchester County, SC**Charleston, WV MSA**
Kanawha County, WV
Putnam County, WV**Charlotte–Gastonia–Rock Hill, NC–SC MSA**
Cabarrus County, NC
Gaston County, NC
Lincoln County, NC
Mecklenburg County, NC
Rowan County, NC
Union County, NC
York County, SC**Charlottesville, VA MSA**
Albemarle County, VA
Fluvanna County, VA
Greene County, VA
Charlottesville city, VA**Chattanooga, TN–GA MSA**
Catoosa County, GA
Dade County, GA
Walker County, GA
Hamilton County, TN
Marion County, TN**Cheyenne, WY MSA**
Laramie County, WY**Chicago, IL PMSA—see Chicago–Gary–
Kenosha, IL–IN–WI CMSA**

Chicago–Gary–Kenosha, IL–IN–WI CMSA
 Chicago, IL PMSA
 Cook County, IL
 DeKalb County, IL
 DuPage County, IL
 Grundy County, IL
 Kane County, IL
 Kendall County, IL
 Lake County, IL
 McHenry County, IL
 Will County, IL
 Gary, IN PMSA
 Lake County, IN
 Porter County, IN
 Kankakee, IL PMSA
 Kankakee County, IL

Chicago–Gary–Kenosha, IL–IN–WI CMSA—Con.

Kenosha, WI PMSA
Kenosha County, WI

Chico–Paradise, CA MSA

Butte County, CA

Cincinnati, OH–KY–IN PMSA—see**Cincinnati–Hamilton, OH–KY–IN CMSA****Cincinnati–Hamilton, OH–KY–IN CMSA**

Cincinnati, OH–KY–IN PMSA
Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH
Hamilton–Middletown, OH PMSA
Butler County, OH

Clarksville–Hopkinsville, TN–KY MSA

Christian County, KY
Montgomery County, TN

Cleveland–Lorain–Elyria, OH PMSA—see**Cleveland–Akron, OH CMSA****Cleveland–Akron, OH CMSA**

Akron, OH PMSA
Portage County, OH
Summit County, OH
Cleveland–Lorain–Elyria, OH PMSA
Ashtabula County, OH
Cuyahoga County, OH
Geauga County, OH
Lake County, OH
Lorain County, OH
Medina County, OH

Colorado Springs, CO MSA

El Paso County, CO

Columbia, MO MSA

Boone County, MO

Columbia, SC MSA

Lexington County, SC
Richland County, SC

Columbus, GA–AL MSA

Russell County, AL
Chattahoochee County, GA
Harris County, GA
Muscooke County, GA

Columbus, OH MSA

Delaware County, OH
Fairfield County, OH
Franklin County, OH
Licking County, OH
Madison County, OH
Pickaway County, OH

Corpus Christi, TX MSA

Nueces County, TX
San Patricio County, TX

Cumberland, MD–WV MSA

Allegany County, MD
Mineral County, WV

Dallas, TX PMSA—see Dallas–Fort Worth, TX CMSA**Dallas–Fort Worth, TX CMSA**

Dallas, TX PMSA
Collin County, TX
Dallas County, TX
Denton County, TX
Ellis County, TX
Henderson County, TX
Hunt County, TX
Kaufman County, TX
Rockwall County, TX
Fort Worth–Arlington, TX PMSA
Hood County, TX
Johnson County, TX
Parker County, TX
Tarrant County, TX

Danbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Danville, VA MSA**

Pittsylvania County, VA
Danville city, VA

Davenport–Moline–Rock Island, IA–IL MSA

Henry County, IL
Rock Island County, IL
Scott County, IA

Dayton–Springfield, OH MSA

Clark County, OH
Greene County, OH
Miami County, OH
Montgomery County, OH

Daytona Beach, FL MSA

Flagler County, FL
Volusia County, FL

Decatur, AL MSA

Lawrence County, AL
Morgan County, AL

Decatur, IL MSA

Macon County, IL

Denver, CO PMSA—see Denver–Boulder–Greeley, CO CMSA**Denver–Boulder–Greeley, CO CMSA**

Boulder–Longmont, CO PMSA
Boulder County, CO
Denver, CO PMSA
Adams County, CO
Arapahoe County, CO
Denver County, CO
Douglas County, CO
Jefferson County, CO
Greeley, CO PMSA
Weld County, CO

Des Moines, IA MSA

Dallas County, IA
Polk County, IA
Warren County, IA

Detroit, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA**Detroit–Ann Arbor–Flint, MI CMSA**

Ann Arbor, MI PMSA
Lenawee County, MI
Livingston County, MI
Washtenaw County, MI
Detroit, MI PMSA
Lapeer County, MI
Macomb County, MI
Monroe County, MI
Oakland County, MI
St. Clair County, MI
Wayne County, MI

Detroit–Ann Arbor–Flint, MI CMSA—Con.

Flint, MI PMSA
Genesee County, MI

Dothan, AL MSA

Dale County, AL
Houston County, AL

Dover, DE MSA

Kent County, DE

Dubuque, IA MSA

Dubuque County, IA

Duluth–Superior, MN–WI MSA

St. Louis County, MN
Douglas County, WI

Dutchess County, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Eau Claire, WI MSA**

Chippewa County, WI
Eau Claire County, WI

El Paso, TX MSA

El Paso County, TX

Elkhart–Goshen, IN MSA

Elkhart County, IN

Elmira, NY MSA

Chemung County, NY

Enid, OK MSA

Garfield County, OK

Erie, PA MSA

Erie County, PA

Eugene–Springfield, OR MSA

Lane County, OR

Evansville–Henderson, IN–KY MSA

Posey County, IN
Vanderburgh County, IN
Warrick County, IN
Henderson County, KY

Fargo–Moorhead, ND–MN MSA

Clay County, MN
Cass County, ND

Fayetteville, NC MSA

Cumberland County, NC

Fayetteville–Springdale–Rogers, AR MSA

Benton County, AR
Washington County, AR

Fitchburg–Leominster, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Flint, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA****Florence, AL MSA**

Colbert County, AL
Lauderdale County, AL

Florence, SC MSA

Florence County, SC

Fort Collins–Loveland, CO MSA

Larimer County, CO

Fort Lauderdale, FL PMSA—see Miami–Fort Lauderdale, FL CMSA**Fort Myers–Cape Coral, FL MSA**

Lee County, FL

Fort Pierce–Port St. Lucie, FL MSA

Martin County, FL
St. Lucie County, FL

Fort Smith, AR—OK MSA
Crawford County, AR
Sebastian County, AR
Sequoyah County, OK

Fort Walton Beach, FL MSA
Okaloosa County, FL

Fort Wayne, IN MSA
Adams County, IN
Allen County, IN
De Kalb County, IN
Huntington County, IN
Wells County, IN
Whitley County, IN

**Fort Worth—Arlington, TX PMSA—see
Dallas—Fort Worth, TX CMSA**

Fresno, CA MSA
Fresno County, CA
Madera County, CA

Gadsden, AL MSA
Etowah County, AL

Gainesville, FL MSA
Alachua County, FL

**Galveston—Texas City, TX PMSA—see
Houston—Galveston—Brazoria, TX CMSA**

**Gary, IN PMSA—see Chicago—Gary—
Kenosha, IL—IN—WI CMSA**

Glens Falls, NY MSA
Warren County, NY
Washington County, NY

Goldsboro, NC MSA
Wayne County, NC

Grand Forks, ND—MN MSA
Polk County, MN
Grand Forks County, ND

Grand Rapids—Muskegon—Holland, MI MSA
Allegan County, MI
Kent County, MI
Muskegon County, MI
Ottawa County, MI

Great Falls, MT MSA
Cascade County, MT

**Greeley, CO PMSA—see Denver—Boulder—
Greeley, CO CMSA**

Green Bay, WI MSA
Brown County, WI

**Greensboro—Winston-Salem—High Point, NC
MSA**
Alamance County, NC
Davidson County, NC
Davie County, NC
Forsyth County, NC
Guilford County, NC
Randolph County, NC
Stokes County, NC
Yadkin County, NC

Greenville, NC MSA
Pitt County, NC

Greenville—Spartanburg—Anderson, SC MSA
Anderson County, SC
Cherokee County, SC
Greenville County, SC
Pickens County, SC
Spartanburg County, SC

**Hagerstown, MD PMSA—see Washington—
Baltimore, DC—MD—VA—WV CMSA**

**Hamilton—Middletown, OH PMSA—see
Cincinnati—Hamilton, OH—KY—IN CMSA**

Harrisburg—Lebanon—Carlisle, PA MSA
Cumberland County, PA
Dauphin County, PA
Lebanon County, PA
Perry County, PA

Hartford, CT MSA
Hartford County, CT (part)
Avon town, CT
Berlin town, CT
Bloomfield town, CT
Bristol city, CT
Burlington town, CT
Canton town, CT
East Granby town, CT
East Hartford town, CT
East Windsor town, CT
Enfield town, CT
Farmington town, CT
Glastonbury town, CT
Granby town, CT
Hartford city, CT
Manchester town, CT
Marlborough town, CT
New Britain city, CT
Newington town, CT
Plainville town, CT
Rocky Hill town, CT
Simsbury town, CT
Southington town, CT
South Windsor town, CT
Suffield town, CT
West Hartford town, CT
Wethersfield town, CT
Windsor town, CT
Windsor Locks town, CT

Litchfield County, CT (part)
Barkhamsted town, CT
Harwinton town, CT
New Hartford town, CT
Plymouth town, CT
Winchester town, CT

Middlesex County, CT (part)
Cromwell town, CT
Durham town, CT
East Haddam town, CT
East Hampton town, CT
Haddam town, CT
Middlefield town, CT
Middletown city, CT
Portland town, CT

New London County, CT (part)
Colchester town, CT
Lebanon town, CT

Tolland County, CT (part)
Andover town, CT
Bolton town, CT
Columbia town, CT
Coventry town, CT
Ellington town, CT
Hebron town, CT
Mansfield town, CT
Somers town, CT
Stafford town, CT
Tolland town, CT
Vernon town, CT
Willington town, CT

Windham County, CT (part)
Ashford town, CT
Chaplin town, CT
Windham town, CT

Hickory—Morganton, NC MSA
Alexander County, NC
Burke County, NC
Caldwell County, NC
Catawba County, NC

Honolulu, HI MSA
Honolulu County, HI

Houma, LA MSA
Lafourche Parish, LA
Terrebonne Parish, LA

**Houston, TX PMSA—see Houston—Galveston—
Brazoria, TX CMSA**

Houston—Galveston—Brazoria, TX CMSA
Brazoria, TX PMSA
Brazoria County, TX
Galveston—Texas City, TX PMSA
Galveston County, TX
Houston, TX PMSA
Chambers County, TX
Fort Bend County, TX
Harris County, TX
Liberty County, TX
Montgomery County, TX
Waller County, TX

Huntington—Ashland, WV—KY—OH MSA
Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Huntsville, AL MSA
Limestone County, AL
Madison County, AL

Indianapolis, IN MSA
Boone County, IN
Hamilton County, IN
Hancock County, IN
Hendricks County, IN
Johnson County, IN
Madison County, IN
Marion County, IN
Morgan County, IN
Shelby County, IN

Iowa City, IA MSA
Johnson County, IA

Jackson, MI MSA
Jackson County, MI

Jackson, MS MSA
Hinds County, MS
Madison County, MS
Rankin County, MS

Jackson, TN MSA
Madison County, TN

Jacksonville, FL MSA
Clay County, FL
Duval County, FL
Nassau County, FL
St. Johns County, FL

Jacksonville, NC MSA
Onslow County, NC

Jamestown, NY MSA
Chautauqua County, NY

Janesville—Beloit, WI MSA
Rock County, WI

Jersey City, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Johnson City—Kingsport—Bristol, TN—VA MSA

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol city, VA

Johnstown, PA MSA

Cambria County, PA
Somerset County, PA

Joplin, MO MSA

Jasper County, MO
Newton County, MO

Kalamazoo—Battle Creek, MI MSA

Calhoun County, MI
Kalamazoo County, MI
Van Buren County, MI

Kankakee, IL PMSA—see Chicago—Gary—Kenosha, IL—IN—WI CMSA

Kansas City, MO—KS MSA

Johnson County, KS
Leavenworth County, KS
Miami County, KS
Wyandotte County, KS
Cass County, MO
Clay County, MO
Clinton County, MO
Jackson County, MO
Lafayette County, MO
Platte County, MO
Ray County, MO

Kenosha, WI PMSA—see Chicago—Gary—Kenosha, IL—IN—WI CMSA

Killeen—Temple, TX MSA

Bell County, TX
Coryell County, TX

Knoxville, TN MSA

Anderson County, TN
Blount County, TN
Knox County, TN
Loudon County, TN
Sevier County, TN
Union County, TN

Kokomo, IN MSA

Howard County, IN
Tipton County, IN

La Crosse, WI—MN MSA

Houston County, MN
La Crosse County, WI

Lafayette, LA MSA

Acadia Parish, LA
Lafayette Parish, LA
St. Landry Parish, LA
St. Martin Parish, LA

Lafayette, IN MSA

Clinton County, IN
Tippecanoe County, IN

Lake Charles, LA MSA

Calcasieu Parish, LA

Lakeland—Winter Haven, FL MSA

Polk County, FL

Lancaster, PA MSA

Lancaster County, PA

Lansing—East Lansing, MI MSA

Clinton County, MI
Eaton County, MI
Ingham County, MI

Laredo, TX MSA

Webb County, TX

Las Cruces, NM MSA

Dona Ana County, NM

Las Vegas, NV—AZ MSA

Mohave County, AZ
Clark County, NV
Nye County, NV

Lawrence, KS MSA

Douglas County, KS

Lawrence, MA—NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Lawton, OK MSA

Comanche County, OK

Lewiston—Auburn, ME MSA

Androscoggin County, ME (part)
Auburn city, ME
Greene town, ME
Lewiston city, ME
Lisbon town, ME
Mechanic Falls town, ME
Poland town, ME
Sabattus town, ME
Turner town, ME
Wales town, ME

Lexington, KY MSA

Bourbon County, KY
Clark County, KY
Fayette County, KY
Jessamine County, KY
Madison County, KY
Scott County, KY
Woodford County, KY

Lima, OH MSA

Allen County, OH
Auglaize County, OH

Lincoln, NE MSA

Lancaster County, NE

Little Rock—North Little Rock, AR MSA

Faulkner County, AR
Lonoke County, AR
Pulaski County, AR
Saline County, AR

Longview—Marshall, TX MSA

Gregg County, TX
Harrison County, TX
Upshur County, TX

Los Angeles—Riverside—Orange County, CA CMSA

Los Angeles—Long Beach, CA PMSA
Los Angeles County, CA
Orange County, CA PMSA
Orange County, CA
Riverside—San Bernardino, CA PMSA
Riverside County, CA
San Bernardino County, CA
Ventura, CA PMSA
Ventura County, CA

Los Angeles—Long Beach, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Louisville, KY—IN MSA

Clark County, IN
Floyd County, IN
Harrison County, IN
Scott County, IN
Bullitt County, KY
Jefferson County, KY
Oldham County, KY

Lowell, MA—NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Lubbock, TX MSA

Lubbock County, TX

Lynchburg, VA MSA

Amherst County, VA
Bedford County, VA
Campbell County, VA
Bedford city, VA
Lynchburg city, VA

Macon, GA MSA

Bibb County, GA
Houston County, GA
Jones County, GA
Peach County, GA
Twiggs County, GA

Madison, WI MSA

Dane County, WI

Manchester, NH PMSA—see Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Mansfield, OH MSA

Crawford County, OH
Richland County, OH

McAllen—Edinburg—Mission, TX MSA

Hidalgo County, TX

Medford—Ashland, OR MSA

Jackson County, OR

Melbourne—Titusville—Palm Bay, FL MSA

Brevard County, FL

Memphis, TN—AR—MS MSA

Crittenden County, AR
DeSoto County, MS
Fayette County, TN
Shelby County, TN
Tipton County, TN

Merced, CA MSA

Merced County, CA

Miami—Fort Lauderdale, FL CMSA

Fort Lauderdale, FL PMSA
Broward County, FL
Miami, FL PMSA
Dade County, FL

Miami, FL PMSA—see Miami—Fort Lauderdale, FL CMSA

Middlesex—Somerset—Hunterdon, NJ PMSA—see New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Milwaukee—Waukesha, WI PMSA—see Milwaukee—Racine, WI CMSA

Milwaukee—Racine, WI CMSA

Milwaukee—Waukesha, WI PMSA
Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI

Milwaukee–Racine, WI CMSA—Con.

Racine, WI PMSA
Racine County, WI

Minneapolis–St. Paul, MN–WI MSA

Anoka County, MN
Carver County, MN
Chisago County, MN
Dakota County, MN
Hennepin County, MN
Isanti County, MN
Ramsey County, MN
Scott County, MN
Sherburne County, MN
Washington County, MN
Wright County, MN
Pierce County, WI
St. Croix County, WI

Mobile, AL MSA

Baldwin County, AL
Mobile County, AL

Modesto, CA MSA

Stanislaus County, CA

Monmouth–Ocean, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Monroe, LA MSA**

Ouachita Parish, LA

Montgomery, AL MSA

Autauga County, AL
Elmore County, AL
Montgomery County, AL

Muncie, IN MSA

Delaware County, IN

Myrtle Beach, SC MSA

Horry County, SC

Naples, FL MSA

Collier County, FL

Nashua, NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Nashville, TN MSA**

Cheatham County, TN
Davidson County, TN
Dickson County, TN
Robertson County, TN
Rutherford County, TN
Sumner County, TN
Williamson County, TN
Wilson County, TN

Nassau–Suffolk, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New Bedford, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****New Haven–Meriden, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New London–Norwich, CT–RI MSA**

Middlesex County, CT (part)
Fenwick borough, CT
Old Saybrook town, CT
New London County, CT (part)
Bozrah town, CT
East Lyme town, CT
Franklin town, CT
Griswold town balance, CT
Groton city, CT
Groton town balance, CT

New London–Norwich, CT–RI MSA—Con.

New London County, CT (part)—Con.
Groton Long Point borough, CT
Jewett City borough, CT
Ledyard town, CT
Lisbon town, CT
Montville town, CT
New London city, CT
North Stonington town, CT
Norwich city, CT
Old Lyme town, CT
Preston town, CT
Salem town, CT
Sprague town, CT
Stonington borough, CT
Stonington town, CT
Waterford town, CT
Windham County, CT (part)
Canterbury town, CT
Plainfield town, CT
Washington County, RI (part)
Hopkinton town, RI
Westerly town, RI

New Orleans, LA MSA

Jefferson Parish, LA
Orleans Parish, LA
Plaquemines Parish, LA
St. Bernard Parish, LA
St. Charles Parish, LA
St. James Parish, LA
St. John the Baptist Parish, LA
St. Tammany Parish, LA

New York, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**

Bergen–Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (part)
Bridgeport city, CT
Easton town, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (part)
Ansonia city, CT
Beacon Falls town, CT
Derby city, CT
Milford city (balance), CT
Oxford town, CT
Seymour town, CT
Woodmont borough, CT
Danbury, CT PMSA
Fairfield County, CT (part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown borough, CT
Newtown town, CT
Redding town, CT
Ridgefield town, CT
Sherman town, CT
Litchfield County, CT (part)
Bridgewater town, CT
New Milford town, CT
Roxbury town, CT
Washington town, CT
Dutchess County, NY PMSA
Dutchess County, NY

New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA—Con.

Jersey City, NJ PMSA
Hudson County, NJ
Middlesex–Somerset–Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth–Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau–Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY
New Haven–Meriden, CT PMSA
Middlesex County, CT (part)
Clinton town, CT
Killingworth town, CT
New Haven County, CT (part)
Bethany town, CT
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT
Woodbridge town, CT
New York, NY PMSA
Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY
Queens County, NY
Richmond County, NY
Rockland County, NY
Westchester County, NY
Newark, NJ PMSA
Essex County, NJ
Morris County, NJ
Sussex County, NJ
Union County, NJ
Warren County, NJ
Newburgh, NY–PA PMSA
Orange County, NY
Pike County, PA
Stamford–Norwalk, CT PMSA
Fairfield County, CT (part)
Darien town, CT
Greenwich town, CT
New Canaan town, CT
Norwalk city, CT
Stamford city, CT
Weston town, CT
Westport town, CT
Wilton town, CT
Trenton, NJ PMSA
Mercer County, NJ
Waterbury, CT PMSA
Litchfield County, CT (part)
Bethlehem town, CT
Thomaston town, CT
Watertown town, CT
Woodbury town, CT
New Haven County, CT (part)
Middlebury town, CT
Naugatuck borough, CT
Prospect town, CT
Southbury town, CT
Waterbury city, CT
Wolcott town, CT

Newark, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Newburgh, NY–PA PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Norfolk–Virginia Beach–Newport News, VA–NC MSA

Currituck County, NC
Gloucester County, VA
Isle of Wight County, VA
James City County, VA
Mathews County, VA
York County, VA
Chesapeake city, VA
Hampton city, VA
Newport News city, VA
Norfolk city, VA
Poquoson city, VA
Portsmouth city, VA
Suffolk city, VA
Virginia Beach city, VA
Williamsburg city, VA

Oakland, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Ocala, FL MSA

Marion County, FL

Odessa–Midland, TX MSA

Ector County, TX
Midland County, TX

Oklahoma City, OK MSA

Canadian County, OK
Cleveland County, OK
Logan County, OK
McClain County, OK
Oklahoma County, OK
Pottawatomie County, OK

Olympia, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Omaha, NE–IA MSA

Pottawattamie County, IA
Cass County, NE
Douglas County, NE
Sarpy County, NE
Washington County, NE

Orange County, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Orlando, FL MSA

Lake County, FL
Orange County, FL
Osceola County, FL
Seminole County, FL

Owensboro, KY MSA

Daviess County, KY

Panama City, FL MSA

Bay County, FL

Parkersburg–Marietta, WV–OH MSA

Washington County, OH
Wood County, WV

Pensacola, FL MSA

Escambia County, FL
Santa Rosa County, FL

Peoria–Pekin, IL MSA

Peoria County, IL
Tazewell County, IL
Woodford County, IL

Philadelphia, PA–NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Atlantic–Cape May, NJ PMSA

Atlantic County, NJ
Cape May County, NJ

Philadelphia, PA–NJ PMSA

Burlington County, NJ
Camden County, NJ
Gloucester County, NJ
Salem County, NJ
Bucks County, PA
Chester County, PA
Delaware County, PA
Montgomery County, PA

Philadelphia County, PA

Vineland–Millville–Bridgeton, NJ PMSA

Cumberland County, NJ

Wilmington–Newark, DE–MD PMSA

New Castle County, DE
Cecil County, MD

Phoenix–Mesa, AZ MSA

Maricopa County, AZ
Pinal County, AZ

Pine Bluff, AR MSA

Jefferson County, AR

Pittsburgh, PA MSA

Allegheny County, PA
Beaver County, PA
Butler County, PA
Fayette County, PA
Washington County, PA
Westmoreland County, PA

Pittsfield, MA MSA

Berkshire County, MA (part)
Adams town, MA
Cheshire town, MA
Dalton town, MA
Hinsdale town, MA
Lanesborough town, MA
Lee town, MA
Lenox town, MA
Pittsfield city, MA
Richmond town, MA
Stockbridge town, MA

Portland, ME MSA

Cumberland County, ME (part)
Cape Elizabeth town, ME
Casco town, ME
Cumberland town, ME
Falmouth town, ME
Freeport town, ME
Gorham town, ME
Gray town, ME
North Yarmouth town, ME
Portland city, ME
Raymond town, ME
Scarborough town, ME
South Portland city, ME
Standish town, ME
Westbrook city, ME
Windham town, ME
Yarmouth town, ME

York County, ME (part)

Buxton town, ME
Hollis town, ME
Limington town, ME
Old Orchard Beach town, ME

Portland–Vancouver, OR–WA PMSA—see Portland–Salem, OR–WA CMSA

Portland–Salem, OR–WA CMSA

Portland–Vancouver, OR–WA PMSA

Clackamas County, OR
Columbia County, OR
Multnomah County, OR
Washington County, OR
Yamhill County, OR
Clark County, WA

Salem, OR PMSA

Marion County, OR
Polk County, OR

Portsmouth–Rochester, NH–ME PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Providence–Fall River–Warwick, RI–MA MSA

Bristol County, MA (part)
Attleboro city, MA
Fall River city, MA
North Attleborough town, MA
Rehoboth town, MA
Seekonk town, MA
Somerset town, MA
Swansea town, MA
Westport town, MA
Bristol County, RI
Barrington town, RI
Bristol town, RI
Warren town, RI
Kent County, RI
Coventry town, RI
East Greenwich town, RI
Warwick city, RI
West Greenwich town, RI
West Warwick town, RI
Newport County, RI (part)
Jamestown town, RI
Little Compton town, RI
Tiverton town, RI
Providence County, RI
Burrillville town, RI
Central Falls city, RI
Cranston city, RI
Cumberland town, RI
East Providence city, RI
Foster town, RI
Glocester town, RI
Johnston town, RI
Lincoln town, RI
North Providence town, RI
North Smithfield town, RI
Pawtucket city, RI
Providence city, RI
Scituate town, RI
Smithfield town, RI
Woonsocket city, RI
Washington County, RI (part)
Charlestown town, RI
Exeter town, RI
Narragansett town, RI
North Kingstown town, RI
Richmond town, RI
South Kingstown town, RI

Provo–Orem, UT MSA

Utah County, UT

Pueblo, CO MSA

Pueblo County, CO

Punta Gorda, FL MSA

Charlotte County, FL

Racine, WI PMSA—see Milwaukee—Racine, WI CMSA

Raleigh—Durham—Chapel Hill, NC MSA

Chatham County, NC
Durham County, NC
Franklin County, NC
Johnston County, NC
Orange County, NC
Wake County, NC

Rapid City, SD MSA

Pennington County, SD

Reading, PA MSA

Berks County, PA

Redding, CA MSA

Shasta County, CA

Reno, NV MSA

Washoe County, NV

Richland—Kennewick—Pasco, WA MSA

Benton County, WA
Franklin County, WA

Richmond—Petersburg, VA MSA

Charles City County, VA
Chesterfield County, VA
Dinwiddie County, VA
Goochland County, VA
Hanover County, VA
Henrico County, VA
New Kent County, VA
Powhatan County, VA
Prince George County, VA
Colonial Heights city, VA
Hopewell city, VA
Petersburg city, VA
Richmond city, VA

Riverside—San Bernardino, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Roanoke, VA MSA

Botetourt County, VA
Roanoke County, VA
Roanoke city, VA
Salem city, VA

Rochester, MN MSA

Olmsted County, MN

Rochester, NY MSA

Genesee County, NY
Livingston County, NY
Monroe County, NY
Ontario County, NY
Orleans County, NY
Wayne County, NY

Rockford, IL MSA

Boone County, IL
Ogle County, IL
Winnebago County, IL

Rocky Mount, NC MSA

Edgecombe County, NC
Nash County, NC

Sacramento, CA PMSA—see Sacramento—Yolo, CA CMSA

Sacramento—Yolo, CA CMSA

Sacramento, CA PMSA
El Dorado County, CA
Placer County, CA
Sacramento County, CA
Yolo, CA PMSA
Yolo County, CA

Saginaw—Bay City—Midland, MI MSA

Bay County, MI
Midland County, MI
Saginaw County, MI

St. Cloud, MN MSA

Benton County, MN
Stearns County, MN

St. Joseph, MO MSA

Andrew County, MO
Buchanan County, MO

St. Louis, MO—IL MSA

Clinton County, IL
Jersey County, IL
Madison County, IL
Monroe County, IL
St. Clair County, IL
Franklin County, MO
Jefferson County, MO
Lincoln County, MO
St. Charles County, MO
St. Louis County, MO
Warren County, MO
St. Louis city, MO

Salem, OR PMSA—see Portland—Salem, OR—WA CMSA

Salinas, CA MSA

Monterey County, CA

Salt Lake City—Ogden, UT MSA

Davis County, UT
Salt Lake County, UT
Weber County, UT

San Angelo, TX MSA

Tom Green County, TX

San Antonio, TX MSA

Bexar County, TX
Comal County, TX
Guadalupe County, TX
Wilson County, TX

San Diego, CA MSA

San Diego County, CA

San Francisco, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

San Francisco—Oakland—San Jose, CA CMSA

Oakland, CA PMSA
Alameda County, CA
Contra Costa County, CA
San Francisco, CA PMSA
Marin County, CA
San Francisco County, CA
San Mateo County, CA
San Jose, CA PMSA
Santa Clara County, CA
Santa Cruz—Watsonville, CA PMSA
Santa Cruz County, CA
Santa Rosa, CA PMSA
Sonoma County, CA
Vallejo—Fairfield—Napa, CA PMSA
Napa County, CA
Solano County, CA

San Jose, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

San Luis Obispo—Atascadero—Paso Robles, CA MSA

San Luis Obispo County, CA

Santa Barbara—Santa Maria—Lompoc, CA MSA

Santa Barbara County, CA

Santa Cruz—Watsonville, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Santa Fe, NM MSA

Los Alamos County, NM
Santa Fe County, NM

Santa Rosa, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Sarasota—Bradenton, FL MSA

Manatee County, FL
Sarasota County, FL

Savannah, GA MSA

Bryan County, GA
Chatham County, GA
Effingham County, GA

Scranton—Wilkes-Barre—Hazleton, PA MSA

Columbia County, PA
Lackawanna County, PA
Luzerne County, PA
Wyoming County, PA

Seattle—Bellevue—Everett, WA PMSA—see Seattle—Tacoma—Bremerton, WA CMSA

Seattle—Tacoma—Bremerton, WA CMSA

Bremerton, WA PMSA
Kitsap County, WA
Olympia, WA PMSA
Thurston County, WA
Seattle—Bellevue—Everett, WA PMSA
Island County, WA
King County, WA
Snohomish County, WA
Tacoma, WA PMSA
Pierce County, WA

Sharon, PA MSA

Mercer County, PA

Sheboygan, WI MSA

Sheboygan County, WI

Sherman—Denison, TX MSA

Grayson County, TX

Shreveport—Bossier City, LA MSA

Bossier Parish, LA
Caddo Parish, LA
Webster Parish, LA

Sioux City, IA—NE MSA

Woodbury County, IA
Dakota County, NE

Sioux Falls, SD MSA

Lincoln County, SD
Minnehaha County, SD

South Bend, IN MSA

St. Joseph County, IN

Spokane, WA MSA

Spokane County, WA

Springfield, IL MSA

Menard County, IL
Sangamon County, IL

Springfield, MO MSA

Christian County, MO
Greene County, MO
Webster County, MO

Springfield, MA MSA

Franklin County, MA (part)
Sunderland town, MA
Hampden County, MA (part)
Agawam city, MA
Chicopee city, MA

Springfield, MA MSA—Con.

Hampden County, MA (part)—Con.
 East Longmeadow town, MA
 Hampden town, MA
 Holyoke city, MA
 Longmeadow town, MA
 Ludlow town, MA
 Monson town, MA
 Montgomery town, MA
 Palmer town, MA
 Russell town, MA
 Southwick town, MA
 Springfield city, MA
 Westfield city, MA
 West Springfield town, MA
 Wilbraham town, MA
 Hampshire County, MA (part)
 Amherst town, MA
 Belchertown town, MA
 Easthampton town, MA
 Granby town, MA
 Hadley town, MA
 Hatfield town, MA
 Huntington town, MA
 Northampton city, MA
 Southampton town, MA
 South Hadley town, MA
 Ware town, MA
 Williamsburg town, MA

Stamford–Norwalk, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**State College, PA MSA**
Centre County, PA**Steubenville–Weirton, OH–WV MSA**

Jefferson County, OH
 Brooke County, WV
 Hancock County, WV

Stockton–Lodi, CA MSA
San Joaquin County, CA**Sumter, SC MSA**
Sumter County, SC**Syracuse, NY MSA**
Cayuga County, NY
Madison County, NY
Onondaga County, NY
Oswego County, NY**Tacoma, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA****Tallahassee, FL MSA**
Gadsden County, FL
Leon County, FL**Tampa–St. Petersburg–Clearwater, FL MSA**
Hernando County, FL
Hillsborough County, FL
Pasco County, FL
Pinellas County, FL**Terre Haute, IN MSA**
Clay County, IN
Vermillion County, IN
Vigo County, IN**Texarkana, TX–Texarkana, AR MSA**
Miller County, AR
Bowie County, TX**Toledo, OH MSA**

Fulton County, OH
 Lucas County, OH
 Wood County, OH

Topeka, KS MSA
Shawnee County, KS**Trenton, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****Tucson, AZ MSA**
Pima County, AZ**Tulsa, OK MSA**
Creek County, OK
Osage County, OK
Rogers County, OK
Tulsa County, OK
Wagoner County, OK**Tuscaloosa, AL MSA**
Tuscaloosa County, AL**Tyler, TX MSA**
Smith County, TX**Utica–Rome, NY MSA**
Herkimer County, NY
Oneida County, NY**Vallejo–Fairfield–Napa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA****Ventura, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA****Victoria, TX MSA**
Victoria County, TX**Vineland–Millville–Bridgeton, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Visalia–Tulare–Porterville, CA MSA**
Tulare County, CA**Waco, TX MSA**
McLennan County, TX**Washington, DC–MD–VA–WV PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA****Washington–Baltimore, DC–MD–VA–WV CMSA**
Baltimore, MD PMSA
Anne Arundel County, MD
Baltimore County, MD
Carroll County, MD
Harford County, MD
Howard County, MD
Queen Anne's County, MD
Baltimore city, MD
Hagerstown, MD PMSA
Washington County, MD
Washington, DC–MD–VA–WV PMSA
District of Columbia, DC
Calvert County, MD
Charles County, MD
Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA**Washington–Baltimore, DC–MD–VA–WV CMSA—Con.**

Washington, DC–MD–VA–WV PMSA—Con.
 Fauquier County, VA
 King George County, VA
 Loudoun County, VA
 Prince William County, VA
 Spotsylvania County, VA
 Stafford County, VA
 Warren County, VA
 Alexandria city, VA
 Fairfax city, VA
 Falls Church city, VA
 Fredericksburg city, VA
 Manassas city, VA
 Manassas Park city, VA
 Berkeley County, WV
 Jefferson County, WV

Waterbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Waterloo–Cedar Falls, IA MSA**
Black Hawk County, IA**Wausau, WI MSA**
Marathon County, WI**West Palm Beach–Boca Raton, FL MSA**
Palm Beach County, FL**Wheeling, WV–OH MSA**
Belmont County, OH
Marshall County, WV
Ohio County, WV**Wichita, KS MSA**
Butler County, KS
Harvey County, KS
Sedgwick County, KS**Wichita Falls, TX MSA**
Archer County, TX
Wichita County, TX**Williamsport, PA MSA**
Lycoming County, PA**Wilmington–Newark, DE–MD PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Wilmington, NC MSA**
Brunswick County, NC
New Hanover County, NC**Worcester, MA–CT PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****Yakima, WA MSA**
Yakima County, WA**Yolo, CA PMSA—see Sacramento–Yolo, CA CMSA****York, PA MSA**
York County, PA**Youngstown–Warren, OH MSA**
Columbiana County, OH
Mahoning County, OH
Trumbull County, OH**Yuba City, CA MSA**
Sutter County, CA
Yuba County, CA**Yuma, AZ MSA**
Yuma County, AZ

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

- Printed reports [P]
- CD-ROM [C]
- Highlights online [+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through January 1996) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available March 1996 through May 1996) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available November 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

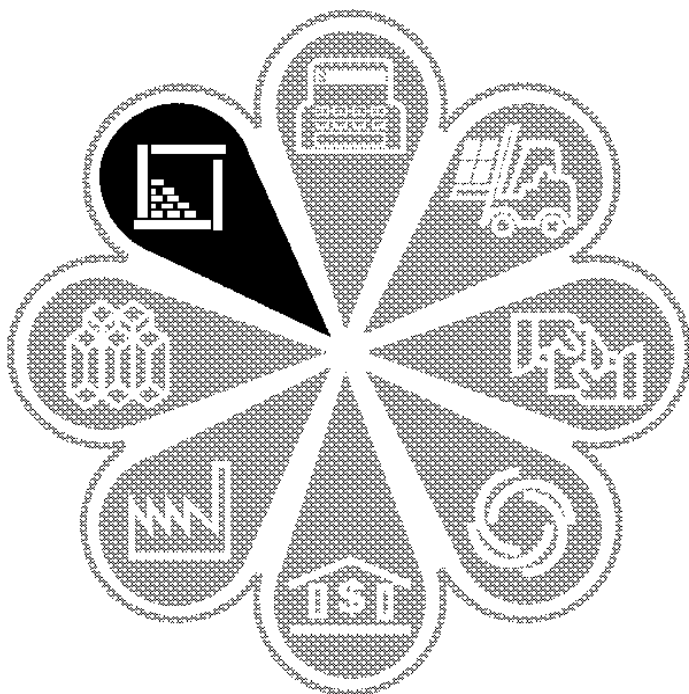
Census of Construction Industries

CC92-A-8

GEOGRAPHIC AREA SERIES

Mountain States

Arizona, Colorado, Idaho, Montana,
Nevada, New Mexico, Utah, Wyoming



Acknowledgments

Many persons participated in the various activities of the 1992 Census of Construction Industries. The overall planning and review of the census operations were performed by the Economic Census Staff of the Economic Planning and Coordination Division.

This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Tamara A. Cole**, **Jennifer L. Evans**, **Susan L. Hostetter**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke** and **Michael E. Kornbau**. The Systems Support Staff maintained the small computers and assisted in the management of computer output.

Systems and procedures for mailout, receipt, correspondence, data input, industry classification, other clerical processing, administrative-record processing, quality control, and the associated electronic computer programs were developed in the Economic Planning and Coordination Division.

Mailout preparation and receipt operations, clerical and analytical review activities, data keying, and geocoding review were performed by the staff of the Data Preparation Division, **Judith N. Petty**, Chief.

Geographic coding procedures and associated computer programs were developed by the staff of the Geography Division, **Joel Morrison**, Chief.

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Computer processing was performed in the Computer Services Division, **Marvin D. Raines**, Chief.

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Special acknowledgment is also due the many businesses whose cooperation has contributed to the publication of these data.

If you have any questions concerning the statistics in this report, call 301-457-4680.

1992 Census of Construction Industries

CC92-A-8

GEOGRAPHIC AREA SERIES

Mountain States

Arizona, Colorado, Idaho, Montana,
Nevada, New Mexico, Utah, Wyoming

Issued March 1996



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Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director



**Economics and Statistics
Administration**

Everett M. Ehrlich, Under Secretary
for Economic Affairs



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Martha Farnsworth Riche, Director
Bryant Benton, Deputy Director

Paula J. Schneider, Principal Associate
Director for Programs

Frederick T. Knickerbocker, Associate
Director for Economic Programs

Thomas L. Mesenbourg, Assistant Director
for Economic Programs

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DIVISION**

John P. Govoni, Chief

MANUFACTURING AND CONSTRUCTION DIVISION

David W. Cartwright, Chief

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Mountain States

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Users' Guide for Locating Statistics in This Report by Table Number	XI
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New Mexico	NM-1
Utah	UT-1
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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

IV INTRODUCTION

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

CONSTRUCTION—GEOGRAPHIC AREA SERIES

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Assets and depreciation (gross book value):					
Beginning of year—buildings, machinery, and equipment	4				
End of year—total	2, 4	2	6	7	
End of year—buildings, machinery, and equipment	4				
Depreciation charges during year—buildings, machinery, and equipment	4				
Capital expenditures:					
Total capital expenditures	2, 4	2	6	7	11
New buildings—machinery and equipment	4				
Used buildings—machinery and equipment	4				
Communication services, costs for	3				
Employees:					
All employees—average number	1, 2, 3	2	6	7	11
Construction workers—average number	2, 3, 9	2, 9			
Construction workers—quarterly	3, 9	9			
Other employees—average number	3				
Other employees—quarterly	3				
Establishments:					
Number in business during year:					
All	1				
With payroll	1, 2, 3, 5, 9	2, 9	6	7	11
Without payroll	1				
Fringe benefits—legally required and voluntary expenditures	3				
Inventories	5				
Materials, components, supplies, and fuels—costs for	2, 3	2	6	7	11
Ownership—private or government owned	3				
Payroll:					
First-quarter, all employees	3				
Annual:					
All employees	2, 3	2	6	7	11
Construction workers	2, 3	2			
Other employees	3				
Power, fuels, and lubricants—costs for	3				
Proprietors and working partners:					
All establishments	1				
Establishments with payroll	1, 3				
Establishments without payroll	1				
Ratios, selected industry	10	10			
Receipts and value:					
Dollar value of business done:					
All establishments	1				
Establishments with payroll	1, 3		6	7	
Establishments without payroll	1				
Value of construction work, total	2, 3, 5, 8	2	6	7	11
For work subcontracted in from others	2, 3	2			
Other business receipts	3				

See footnotes at end of table.

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Receipts and value:—Con.					
Net value of construction work.	2, 3	2	6	7	11
Value added.	2, 3	2	6	7	11
Rental costs:					
Total.	2, 3	2	6	7	
For machinery and equipment.	3				
For buildings.	3				
Repairs to buildings and other structures.	3				
Repairs to machinery and equipment.	3				
Subcontract work to others, costs for.	2, 3	2	6	7	11
Type and class of construction ²	8				

Note: Data for 1987 and earlier years are also available in some of these tables.

¹CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan statistical area.

²Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.



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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Arizona. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 22,568 establishments in this State operating in the construction industries. These establishments accounted for \$10.9 billion in total dollar value of business done.

Most of the 22,568 construction establishments were small. Of the total, 14,262 were nonemployers, and over half of the employer establishments had less than 5 employees. The 3,775 construction establishments with 5 employees or more, while representing only 17 percent of all establishments, accounted for more than 88 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$10.5 billion in total dollar value of business done. Of this amount, \$10.3 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$3.5 billion, leaving net value of construction work of \$6.8 billion. In addition, these establishments paid out \$3.2 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$4.1 billion. (See Introduction and appendixes for explanation of terms.)

There were 8,306 establishments with total employment averaging 86,749 during the year. Total payroll for 1992 was \$1.9 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 14,262 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$457 million. Most of these establishments, about 84 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

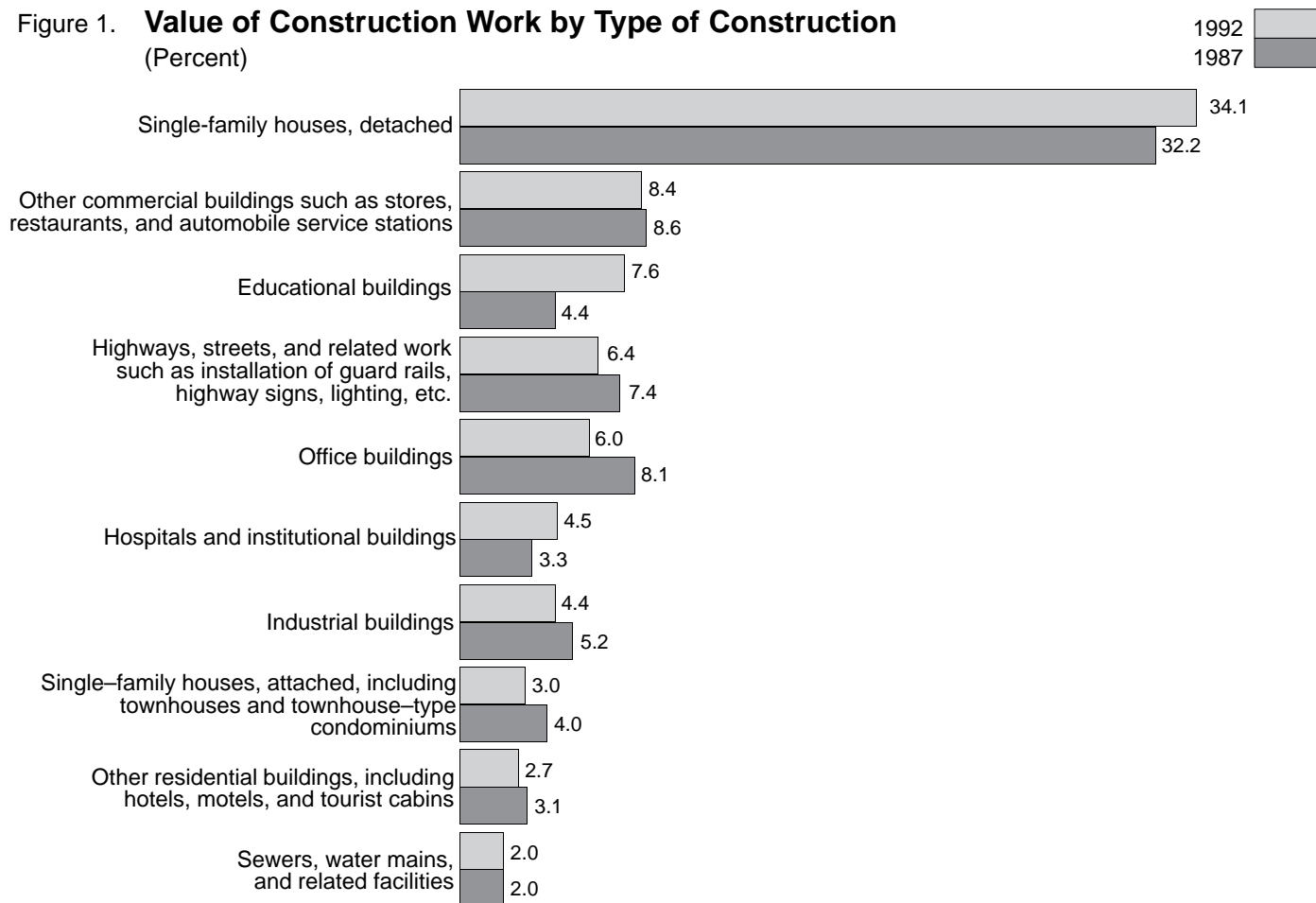


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

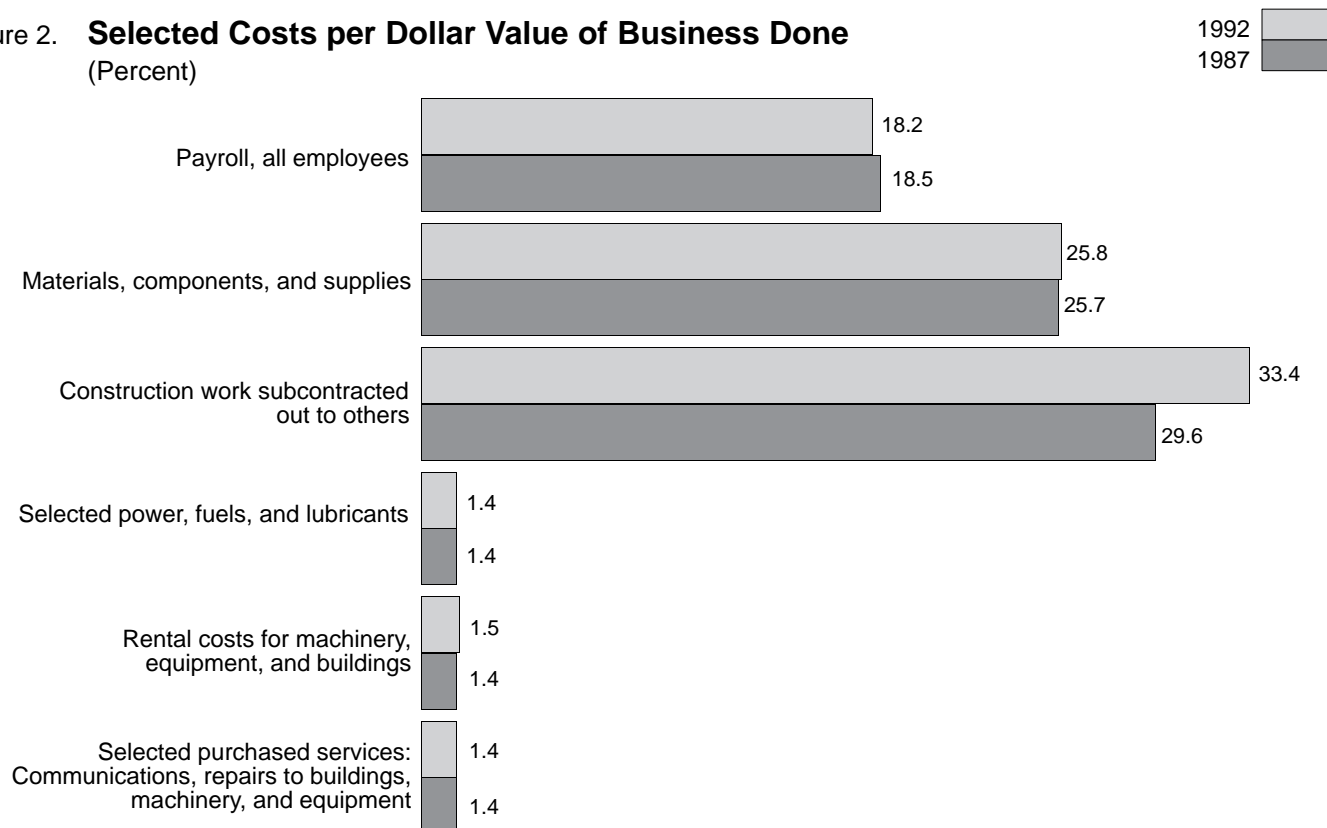


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column —	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done ¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	22 568	17 137	86 749	10 929 101	14 262	13 798	456 728	8 306	3 339	86 749	10 472 373	1	1
15	Building construction—General contractors and operative builders ----	4 321	2 546	19 554	5 485 519	2 094	1 821	189 766	2 227	725	19 554	5 295 753	2	1
16	Heavy construction other than building construction—contractors -----	672	341	10 283	1 254 483	234	224	6 928	438	117	10 283	1 247 555	2	2
17	Special trade contractors -----	17 576	14 249	56 911	4 189 099	11 934	11 753	260 034	5 642	2 496	56 911	3 929 065	1	1
1711	Plumbing, heating, and air-conditioning --	2 303	1 616	9 435	840 495	1 218	1 187	40 320	1 085	429	9 435	800 175	2	2
1731	Electrical work -----	1 612	1 063	7 176	535 305	844	803	19 588	768	260	7 176	515 717	3	3
	1987													
15, 16, 17	Construction industries ² -----	25 730	18 460	97 854	11 918 255	16 827	16 480	1 154 733	8 903	1 980	97 854	10 763 522	1	1
15	Building construction—General contractors and operative builders ----	5 189	3 020	20 875	5 536 002	2 983	2 680	310 121	2 206	340	20 875	5 225 881	2	2
16	Heavy construction other than building construction—contractors -----	743	288	13 037	1 412 576	249	242	19 646	494	46	13 037	1 392 930	2	2
17	Special trade contractors -----	18 910	14 397	62 762	4 337 349	12 944	12 834	466 482	5 966	1 563	62 762	3 870 867	1	1
1711	Plumbing, heating, and air-conditioning --	2 361	1 517	10 545	826 909	1 275	1 264	56 568	1 086	253	10 545	770 341	2	2
1731	Electrical work -----	1 788	1 090	8 298	560 590	911	885	35 056	877	205	8 298	525 534	3	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	8 306	86 749	66 453	1 904 417	1 306 317	10 323 979	6 822 623	4 122 386
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	1 393	7 131	5 057	112 523	71 934	823 932	498 838	280 868
1522	Other residential buildings -----	55	540	384	8 857	4 929	66 307	37 850	23 030
1531	Operative builders -----	244	2 769	712	87 470	15 623	1 426 598	618 733	445 166
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	80	1 301	903	34 221	22 037	232 124	94 011	44 988
1542	Nonresidential buildings, n.e.c. -----	454	7 812	4 966	243 044	139 475	2 692 216	953 863	677 252
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	148	4 407	3 506	122 025	84 767	641 021	498 799	283 205
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	150	3 222	2 596	97 439	70 678	277 210	259 396	183 186
1629	Heavy construction, n.e.c. -----	139	2 624	2 023	69 622	48 886	312 993	262 012	154 627
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	1 085	9 435	7 210	213 561	153 237	789 707	742 960	397 358
1721	Painting and paper hanging -----	511	3 305	2 734	54 461	42 188	151 525	143 802	98 005
1731	Electrical work -----	768	7 176	5 595	152 113	108 208	509 294	486 802	255 321
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	342	2 779	2 498	49 455	42 157	151 336	(D)	87 748
1742	Plastering, drywall, and insulation work -----	430	7 908	6 983	150 872	124 199	387 576	369 049	225 553
1743	Terrazzo, tile, marble, and mosaic work -----	159	724	590	11 781	9 430	37 797	35 504	21 393
175	Carpentry and floor work:								
1751	Carpentry -----	489	6 561	5 638	127 529	102 891	483 709	459 780	221 374
1752	Floor laying and other floor work -----	151	872	678	18 693	12 847	76 920	72 460	36 583
1761	Roofing, siding, and sheet metal work -----	349	4 140	3 325	72 978	52 728	264 798	259 248	137 605
1771	Concrete work -----	421	5 472	4 547	105 657	81 055	364 087	345 660	193 148
1781	Water well drilling -----	45	349	288	10 325	8 614	40 362	39 203	25 333
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	77	1 357	1 081	29 709	19 813	108 683	96 420	48 331
1793	Glass and glazing work -----	112	529	360	11 677	7 221	44 188	43 915	21 614
1794	Excavation work -----	125	666	543	14 125	10 435	46 078	42 902	34 017
1795	Wrecking and demolition work -----	* 20	(D)	(D)	(D)	(D)	(D)	10 520	(D)
1796	Installing building equipment, n.e.c. -----	32	444	313	13 007	10 399	61 072	(D)	28 774
1799	Special trade contractors, n.e.c. -----	524	4 923	3 694	88 711	59 305	319 238	253 729	188 067

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
2 848 631	3 501 356	3 104 673	161 474	123 711	998 778	97 854	9 973 925	4 213 191	1	1	3	15, 16, 17
												15
233 835 15 241	325 094 28 456	45 399 *1 665	7 074 494	6 235 (S)	47 539 1 775	5 418 1 278	597 031 381 213	218 421 64 659	4 10	5 17	16 (S)	152 1521 1522
193 944	807 866	807	4 817	7 427	59 138	6 115	1 900 939	565 485	4	6	9	1531
52 614 290 933	138 112 1 738 353	32 663 47 255	4 407 21 536	2 299 9 957	16 371 118 609	1 087 6 977	185 471 1 642 403	55 587 465 505	7 3	9 2	28 4	154 1541 1542
												16
222 005	142 222	112 819	28 556	14 021	155 220	5 632	745 440	356 455	3	2	6	1611
(D) 80 278 (D)	(D) 17 814 50 981	(D) 70 608 41 764	(D) 14 045 17 797	(D) 15 890 6 277	(D) 72 130 65 134	1 214 2 812 3 379	130 042 232 527 240 070	48 277 138 571 141 678	(D) 5	(D) 3 4	(D) 14 11	162 1622 1623 1629
												17
356 070	46 748	546 459	14 846	9 364	79 154	10 545	757 758	386 705	2	2	10	1711
46 953	7 723	107 380	1 962	4 082	17 723	2 682	99 106	71 477	7	6	23	1721
237 904	22 492	338 241	6 674	6 157	49 525	8 298	520 045	288 185	3	3	11	1731
59 818 147 636 14 492	(D) 18 527 *2 292	115 001 364 578 36 853	1 642 3 745 680	(S) 6 147 678	15 767 36 361 3 744	3 921 10 340 1 083	191 993 496 921 46 945	113 906 299 752 28 549	5 3 9	(D) 2 8	(S) 11 32	174 1741 1742 1743
249 349 37 219	23 929 4 460	453 883 36 025	5 225 (S)	6 092 (S)	46 091 5 381	5 254 685	354 896 63 918	174 374 25 256	5 9	4 10	12 (S)	175 1751 1752
121 966	5 549	152 416	3 590	3 730	33 868	4 596	261 650	148 528	4	4	15	1761
164 747	18 427	288 545	8 728	5 886	61 336	6 984	449 490	236 607	5	4	13	1771
14 804	1 159	3 183	826	(D)	24 984	312	23 387	12 659	8	3	(D)	1781
51 171 24 648 9 213 (D) (D) (D) 90 885	12 264 273 3 176 (D) (D) (D) 65 509	81 669 26 512 34 896 (D) (D) 7 253 145 407	(S) 872 1 534 (D) (D) 455 6 665	2 137 *184 2 979 (D) (D) 481 7 653	18 422 2 385 20 781 (S) (S) 3 179 42 269	1 237 877 708 (S) (S) 519 4 470	84 388 65 345 65 335 (S) (S) 44 057 255 929	58 860 30 053 50 980 (S) (S) 24 848 156 018	7 13 16 (D) (D) 5 9	6 13 11 36 (D) 7	18 47 28 (D) (Z) 20	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	8 306	8 903	6 803	5 285	1	1	2	3
Proprietors and working partners.....	3 339	1 980	2 001	2 652	3	5	5	6
All employees**	86 749	97 854	64 689	52 868	1	1	1	1
Construction workers:								
March.....	60 322	72 052	48 488	37 098	1	1	2	2
May	66 550	76 217	50 722	41 253	1	1	2	2
August	71 052	79 828	51 002	45 621	1	1	2	2
November.....	67 887	73 329	49 513	45 631	1	1	2	2
Average.....	66 453	75 357	50 662	42 435	1	1	2	2
Other employees:								
March.....	20 041	22 416	13 838	9 773	1	1	1	2
May	20 118	22 654	(NA)	(NA)	1	1	(NA)	(NA)
August	20 429	22 734	(NA)	(NA)	1	1	(NA)	(NA)
November.....	20 596	22 197	(NA)	(NA)	1	1	(NA)	(NA)
Average.....	20 296	22 500	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	1 904 417	1 986 031	1 045 778	648 253	1	1	1	1
Payroll, construction workers	1 306 317	1 365 645	758 760	493 901	1	1	1	1
Payroll, other employees	598 099	620 386	287 017	154 352	1	1	1	2
First-quarter payroll, all employees	413 845	456 877	245 249	136 919	1	1	1	1
Fringe benefits, all employees	405 831	378 140	190 563	133 705	1	1	1	1
Legally required expenditures.....	287 467	273 437	141 042	80 329	1	1	1	1
Voluntary expenditures.....	118 364	104 703	49 521	53 377	1	1	1	1
Dollar value of business done	10 472 373	10 763 522	5 413 396	3 258 743	1	1	1	1
Value of construction work	10 323 979	9 973 925	5 002 050	3 060 011	1	1	1	1
Value of construction work subcontracted in from others	3 104 673	2 922 742	1 432 878	917 602	2	2	1	(Z)
Other business receipts	148 394	337 702	265 757	198 732	3	3	1	4
Net value of construction†	6 822 623	6 792 209	3 580 366	2 157 553	1	1	1	1
Value added††	4 122 386	4 213 191	2 213 619	1 292 615	1	1	1	1
Selected costs	6 349 987	6 098 437	3 054 189	1 842 930	1	1	1	1
Materials, components, and supplies	2 705 631	2 767 021	1 539 050	885 882	1	1	1	1
Construction work subcontracted out to others	3 501 356	3 181 716	1 421 684	902 458	1	2	1	2
Selected power, fuels, and lubricants	143 000	149 699	93 455	54 590	2	1	2	2
Electricity.....	23 227	28 844	13 197	12 545	3	1	2	2
Natural gas	4 030	4 004	2 261	5 124	5	3	4	11
Gasoline and diesel fuel	108 135	107 578	71 449	32 077	2	1	2	1
On highway use.....	81 342	82 919	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use.....	26 793	24 659	(NA)	(NA)	3	2	(NA)	(NA)
Other, including lubricating oils and greases.....	7 609	9 271	6 547	4 846	6	3	3	4
Rental cost for machinery, equipment, and buildings	161 474	152 075	70 500	41 793	3	2	3	1
For machinery and equipment	118 585	96 618	49 276	35 516	4	2	4	1
For buildings.....	42 889	55 456	21 224	6 277	3	2	3	4
Selected purchased services	150 155	145 860	88 429	50 429	3	1	2	2
Communication services	45 747	37 418	20 681	11 947	3	2	2	3
Repairs to buildings and other structures	9 047	8 728	4 775	4 253	8	4	4	14
Repairs to machinery and equipment	95 361	99 714	62 972	34 229	3	1	2	2
Ownership of construction projects:								
Value of construction work	10 323 979	9 973 925	5 002 050	3 060 011	1	1	1	1
Government owned	2 675 276	1 909 345	867 848	554 000	3	2	3	1
Federal	684 746	446 310	(NA)	(NA)	5	4	(NA)	(NA)
State and local	1 990 530	1 463 035	(NA)	(NA)	3	3	(NA)	(NA)
Privately owned	7 648 703	8 064 580	4 134 201	2 506 011	1	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	967 221	1 106 356	2	2
Capital expenditures, other than land -----	123 711	145 696	3	2
New -----	89 345	105 511	3	3
Used -----	34 366	40 185	5	4
Retirements and disposition of depreciable assets -----	92 154	63 745	2	5
End-of-year gross book value of depreciable assets -----	998 778	1 188 307	2	2
Depreciation charges during year -----	120 744	145 521	3	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	166 764	214 360	5	5
Capital expenditures, other than land -----	11 470	37 434	7	6
New buildings and other structures -----	9 586	30 587	8	7
Used buildings and other structures -----	1 884	6 847	17	14
Retirements and disposition of depreciable assets -----	(S)	9 352	(S)	19
End-of-year gross book value of depreciable assets -----	148 814	242 442	5	5
Depreciation charges during year -----	18 241	25 923	3	6
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	800 457	891 885	2	2
Capital expenditures, other than land -----	112 241	108 262	3	2
New machinery and equipment, including automobiles and trucks -----	79 759	74 924	3	3
New automobiles and trucks, intended primarily for highway use -----	32 288	33 693	6	4
Used machinery and equipment, including automobiles and trucks -----	32 482	33 337	5	4
Retirements and disposition of depreciable assets -----	62 734	54 392	3	5
End-of-year gross book value of depreciable assets -----	849 965	945 865	2	2
Depreciation charges during year -----	102 504	119 598	3	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	8 306	1
Value of construction work	10 323 979	1
Establishments with inventories:		
Number	2 769	2
Value of construction work	5 042 945	1
Inventories ¹ :		
End of 1992, materials and supplies	146 042	3
End of 1991, materials and supplies	92 705	4
Establishments with no inventories:		
Number	2 743	3
Value of construction work	3 652 413	2
Establishments not reporting:		
Number	2 794	3
Value of construction work	1 628 622	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	8 306	4 530	1 824	1 038	631	180	79	15	7	1
All employees** -----	86 749	9 002	11 485	13 795	18 565	12 042	11 681	4 804	5 376	(D)
Payroll, all employees -----	1 904 417	138 033	201 665	285 609	408 896	289 262	281 116	118 726	181 110	(D)
Dollar value of business done -----	10 472 373	829 055	927 187	1 391 819	2 156 294	1 495 878	1 409 832	626 825	1 635 483	(D)
Value of construction work -----	10 323 979	817 705	911 834	1 374 545	2 126 965	1 461 270	1 385 437	611 824	1 634 400	(D)
Net value of construction work† -----	6 822 623	633 136	697 667	994 344	1 449 913	958 848	974 077	438 603	676 034	(D)
Value added†† -----	4 122 386	361 785	399 548	576 951	820 462	556 876	546 692	303 476	556 595	(D)
Cost of materials, components, supplies, and fuels -----	2 848 631	282 700	313 472	434 667	658 781	436 580	451 780	150 128	120 522	(D)
Cost of construction work subcontracted out to others -----	3 501 356	184 569	214 167	380 200	677 051	502 422	411 360	173 221	958 366	(D)
Rental cost for machinery, equipment, and buildings -----	161 474	10 719	13 639	21 505	34 782	26 950	17 392	20 041	16 445	(D)
Capital expenditures, other than land -----	123 711	12 750	13 092	15 463	23 329	19 715	17 878	5 183	16 301	(D)
End-of-year gross book value of depreciable assets -----	998 778	88 240	97 508	121 465	212 550	131 907	134 225	70 613	142 271	(D)
1987										
All employees** -----	97 854	(S)	12 996	16 137	23 709	13 029	12 949	6 316	3 584	(D)
Value of construction work -----	9 973 925	(S)	1 123 882	1 365 422	2 576 361	1 382 862	1 369 469	1 307 285	(D)	(D)
Value added†† -----	4 213 191	(S)	488 871	585 579	1 010 864	610 712	600 641	335 844	217 432	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	4	5	5	3	1	3	(Z)	(Z)	(D)
Net value of construction work† -----	1	5	5	5	2	1	1	(Z)	(Z)	(D)
Capital expenditures, other than land -----	3	14	13	10	4	9	4	(Z)	(Z)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	8 306	(S)	(S)	972	2 106	1 590	1 176	819	318	150	143
All employees** -----	86 749	(S)	(S)	1 514	6 787	9 281	11 285	15 417	11 871	8 957	20 543
Payroll, all employees -----	1 904 417	(S)	(S)	17 169	92 392	151 333	200 979	322 651	257 992	216 150	635 820
Dollar value of business done -----	10 472 373	(S)	(S)	71 145	348 605	557 164	819 943	1 252 757	1 118 061	1 032 632	5 244 403
Value of construction work -----	10 323 979	(S)	(S)	70 176	343 688	546 549	809 134	1 233 651	1 100 581	1 017 753	5 175 027
Net value of construction work† -----	6 822 623	(S)	(S)	64 000	314 777	471 541	665 488	1 002 131	875 124	739 227	2 665 775
Value added†† -----	4 122 386	(S)	(S)	38 067	189 224	270 785	380 594	578 675	483 305	396 325	1 770 884
Cost of materials, components, supplies, and fuels -----	2 848 631	(S)	(S)	26 902	130 469	211 371	295 703	442 562	409 298	357 782	964 267
Cost of construction work subcontracted out to others -----	3 501 356	(S)	(S)	6 176	(S)	75 008	143 646	231 520	225 457	278 525	2 509 252
Rental cost for machinery, equipment, and buildings -----	161 474	(S)	(S)	(S)	5 627	8 729	12 308	28 762	23 506	17 760	63 684
Capital expenditures, other than land -----	123 711	(S)	(S)	(S)	(S)	10 702	12 182	16 923	18 943	12 944	42 612
End-of-year gross book value of depreciable assets -----	998 778	(S)	(S)	(S)	(S)	62 021	98 567	160 216	120 774	96 467	392 613
1987											
All employees** -----	97 854	(S)	(S)	(S)	(S)	(S)	12 226	19 298	14 789	9 429	20 851
Value of construction work -----	9 973 925	(S)	(S)	(S)	(S)	(S)	738 468	1 515 530	1 463 902	1 126 716	4 126 518
Value added†† -----	4 213 191	(S)	(S)	(S)	(S)	(S)	381 350	718 312	652 894	483 544	1 432 417
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	9	6	6	5	4	4	2	(Z)
Net value of construction work† -----	1	(S)	(S)	7	5	6	5	4	3	2	1
Capital expenditures, other than land -----	3	(S)	(S)	(S)	(S)	14	14	8	11	1	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	10 323 979	7 842 213	1 524 023	701 041	1	1	3	2
Building construction	8 156 504	6 452 694	1 248 298	455 512	1	1	3	3
Single-family houses	3 830 720	3 312 123	345 635	172 962	2	2	6	6
Single-family houses, detached	3 518 627	3 066 021	303 909	148 696	2	2	6	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	312 093	246 101	41 726	24 266	3	3	11	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	164 680	105 962	35 615	23 103	5	7	5	10
Other residential buildings, including hotels, motels, and tourist cabins	275 831	247 121	16 795	11 915	2	2	12	18
Office buildings	614 852	379 301	185 026	50 525	3	3	6	7
Other commercial buildings such as stores, restaurants, and automobile service stations	868 885	607 794	190 274	70 817	4	5	6	7
Industrial buildings and warehouses	641 126	431 719	146 095	63 312	2	3	3	6
Industrial buildings	456 242	280 159	125 440	50 643	3	4	3	6
Warehouses	184 883	151 560	20 655	12 669	3	3	6	20
Religious buildings	81 933	52 720	23 146	6 068	19	20	31	24
Educational buildings	788 688	595 729	162 471	30 487	3	2	8	5
Hospitals and institutional buildings	465 407	359 448	93 092	12 867	5	1	23	6
Amusement, social, and recreational buildings, indoors	191 514	177 706	10 043	3 765	3	3	26	21
Other nonresidential buildings	232 869	183 072	40 106	9 691	4	3	21	6
Nonbuilding construction	1 910 773	1 389 518	275 725	245 529	2	3	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	663 323	439 067	101 389	122 867	2	2	2	3
Outdoor swimming pools	151 803	130 311	13 937	7 555	24	28	8	26
Airport runways and related work	83 155	74 548	6 656	1 950	5	4	32	24
Private driveways and parking areas	56 764	(D)	(D)	23 378	9	(D)	(D)	7
Recreational facilities	73 506	64 112	4 563	* 4 830	8	7	2	62
Conservation and development construction	59 600	51 695	2 996	4 910	6	6	20	10
Power and communication transmission lines, towers, and related facilities	77 913	49 482	13 986	14 445	5	7	6	6
Sewers, water mains, and related facilities	204 717	163 290	17 295	24 131	4	4	9	9
Sewers, sewer lines, septic systems, and related facilities	84 090	71 245	5 356	7 489	7	7	16	17
Water mains and related facilities	120 627	92 045	11 939	16 642	4	4	9	11
Pipeline construction other than sewer or water lines	118 248	(D)	1 276	5	(D)	(D)	20	20
Sewage treatment and water treatment plants	134 555	99 292	27 049	8 215	6	6	4	21
Other nonbuilding construction	287 189	219 287	35 931	31 972	4	4	7	11
Construction work, n.s.k.	256 702	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
1987								
Value of construction work	9 973 925	7 790 710	1 215 602	572 412	1	1	2	3
Building construction	7 785 004	6 444 677	952 997	358 437	1	1	3	5
Single-family houses	3 610 881	3 254 189	228 649	128 042	2	2	6	5
Single-family houses, detached	3 209 770	2 882 678	212 238	114 853	2	2	7	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	401 111	371 511	16 411	13 189	5	6	7	15
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	502 541	451 011	28 835	22 694	3	4	9	8
Other residential buildings, including hotels, motels, and tourist cabins	314 062	255 711	36 370	21 980	2	2	13	9
Office buildings	807 625	609 074	163 645	34 905	2	2	5	4
Other commercial buildings such as stores, restaurants, and automobile service stations	860 426	632 271	161 604	66 550	3	3	6	11
Industrial buildings and warehouses	643 837	490 410	118 512	34 913	4	5	4	6
Industrial buildings	521 790	393 894	100 792	27 103	5	7	4	7
Warehouses	122 047	96 516	17 720	7 810	5	5	16	10
Religious buildings	86 120	63 178	17 202	5 739	11	15	10	8
Educational buildings	435 485	332 187	88 473	14 824	5	5	12	5
Hospitals and institutional buildings	325 446	227 784	86 047	11 614	4	3	10	6
Amusement, social, and recreational buildings, indoors	79 780	67 283	7 375	5 121	2	2	6	12
Other nonresidential buildings	118 797	84 268	16 281	18 245	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	1 793 689	1 323 337	262 602	207 749	1	2	2	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	733 225	447 550	172 918	112 756	2	3	2	7
Outdoor swimming pools	130 562	111 470	8 110	10 981	8	8	9	15
Private driveways and parking areas	60 785	38 443	8 994	13 347	6	7	3	12
Recreational facilities	62 524	53 037	4 781	4 705	15	16	6	32
Conservation and development construction	42 883	37 792	3 348	1 742	7	7	21	11
Power and communication transmission lines, towers, and related facilities	69 825	60 575	5 081	4 167	4	4	1	21
Sewers, water mains, and related facilities	197 506	168 294	12 346	16 865	3	3	7	9
Sewers, sewer lines, septic systems, and related facilities	91 810	78 077	8 098	5 634	5	4	8	22
Water mains and related facilities	105 696	90 217	4 248	11 231	3	3	5	6
Pipeline construction other than sewer or water lines	36 511	24 468	6 361	5 682	2	(Z)	11	(Z)
Sewage treatment and water treatment plants	28 122	19 773	* 7 290	1 058	15	2	56	(Z)
Other nonbuilding construction	431 746	372 765	40 930	36 446	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	395 201	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	8 306	66 453	60 322	66 550	71 052	67 887	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	1 393	5 057	4 708	5 048	5 451	5 021	4	5	5	5	5	5
1522	Other residential buildings -----	55	384	417	434	367	318	29	12	12	12	12	12
1531	Operative builders -----	244	712	642	739	754	712	11	8	8	9	8	9
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	80	903	768	901	1 021	921	17	8	8	9	8	8
1542	Nonresidential buildings, n.e.c. ----	454	4 966	4 514	4 793	5 490	5 065	8	4	4	5	4	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	148	3 506	2 841	3 792	3 835	3 555	12	3	3	3	4	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	1	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	150	2 596	1 877	2 544	3 066	2 896	11	5	5	5	5	4
1629	Heavy construction, n.e.c. -----	139	2 023	2 043	2 387	2 101	1 561	11	5	4	7	5	5
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 085	7 210	6 792	7 079	7 636	7 332	3	3	3	3	3	3
1721	Painting and paper hanging -----	511	2 734	2 156	2 769	3 108	2 904	5	7	7	7	8	8
1731	Electrical work -----	768	5 595	5 189	5 357	5 811	6 024	3	3	3	3	3	4
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	342	2 498	2 395	2 521	2 536	2 539	6	5	4	6	5	6
1742	Plastering, drywall, and insulation work -----	430	6 983	6 720	6 934	7 168	7 112	6	3	3	3	2	3
1743	Terrazzo, tile, marble, and mosaic work -----	159	590	605	594	622	538	11	10	13	10	13	8
175	Carpentry and floor work:												
1751	Carpentry -----	489	5 638	4 768	5 338	6 010	6 439	6	5	5	5	5	6
1752	Floor laying and other floor work --	151	678	644	657	694	718	8	8	9	9	9	8
1761	Roofing, siding, and sheet metal work -----	349	3 325	3 111	3 415	3 419	3 356	6	5	5	5	5	5
1771	Concrete work -----	421	4 547	4 251	4 618	4 867	4 454	6	5	5	5	5	5
1781	Water well drilling -----	45	288	277	309	302	263	10	8	8	8	8	9
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	77	1 081	1 071	1 075	1 180	998	15	7	7	7	7	8
1793	Glass and glazing work -----	112	360	292	339	401	408	13	14	11	13	18	16
1794	Excavation work -----	125	543	505	542	555	570	15	17	16	18	15	21
1795	Wrecking and demolition work -----	*20	(D)	(D)	(D)	(D)	(D)	43	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	32	313	299	300	317	334	23	7	8	5	7	7
1799	Special trade contractors, n.e.c. ----	524	3 694	3 200	3 870	4 114	3 594	8	11	8	10	11	13

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	10.4	22.0	155.4	.184	.276	.339	.301	.016
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	5.1	15.8	162.9	.137	.284	.395	.055	.009
1522	Other residential buildings -----	9.8	16.4	172.7	.134	.230	.429	*.025	.007
1531	Operative builders -----	11.3	31.6	2 003.7	.061	.136	.566	.001	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	16.2	26.3	257.1	.147	.227	.595	.141	.019
1542	Nonresidential buildings, n.e.c. -----	17.2	31.1	542.1	.090	.108	.646	.018	.008
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	29.8	27.7	182.8	.190	.346	.222	.176	.045
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	21.5	30.2	106.8	.351	.290	.064	.255	.051
1629	Heavy construction, n.e.c. -----	18.9	26.5	154.7	.222	(D)	.163	.133	.057
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.7	22.6	109.5	.270	.451	.059	.692	.019
1721	Painting and paper hanging -----	6.5	16.5	55.4	.359	.310	.051	.709	.013
1731	Electrical work -----	9.3	21.2	91.0	.299	.467	.044	.664	.013
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	8.1	17.8	60.6	.327	.395	(D)	.760	.011
1742	Plastering, drywall, and insulation work -----	18.4	19.1	55.5	.389	.381	.048	.941	.010
1743	Terrazzo, tile, marble, and mosaic work -----	4.5	16.3	64.1	.312	.383	*.061	(S)	.018
175	Carpentry and floor work:								
1751	Carpentry -----	13.4	19.4	85.8	.264	.515	.049	.938	.011
1752	Floor laying and other floor work -----	5.8	21.4	113.5	.243	.484	.058	.468	(S)
1761	Roofing, siding, and sheet metal work -----	11.8	17.6	79.6	.276	.461	.021	.576	.014
1771	Concrete work -----	13.0	19.3	80.1	.290	.452	.051	.793	.024
1781	Water well drilling -----	7.8	29.6	140.1	.256	.367	.029	.079	.020
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	17.7	21.9	100.5	.273	.471	.113	.751	(S)
1793	Glass and glazing work -----	4.7	22.1	122.7	.264	.558	.006	.600	.020
1794	Excavation work -----	5.3	21.2	84.9	.307	.200	.069	.757	.033
1795	Wrecking and demolition work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	13.9	29.3	195.1	.213	(D)	(D)	.119	.007
1799	Special trade contractors, n.e.c. -----	9.4	18.0	86.4	.278	.285	.205	.455	.021

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PHOENIX—MESA, AZ MSA											
15,16,17	Construction industries	4 906	60 139	1 384 878	7 634 431	4 873 332	2 893 556	2 060 685	2 761 099	84 556	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	3 768	64 649	452 190	268 049	158 984	113 736	184 141	2 728	6	5
1522	Other residential buildings	(S)	299	(D)	45 194	(D)	20 053	9 727	(D)	(D)	17	(D)
1531	Operative builders	137	2 031	66 801	1 166 845	473 808	342 098	144 070	693 037	5 834	4	8
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	38	804	22 265	162 897	64 246	32 995	33 155	98 651	(D)	8	8
1542	Nonresidential buildings, n.e.c.	310	5 354	176 437	2 019 219	622 473	382 281	244 829	1 396 746	4 908	4	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	80	3 014	87 694	489 669	373 624	209 743	167 528	116 045	8 387	3	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	95	2 710	84 190	230 549	215 819	153 582	65 617	14 729	14 597	6	4
1629	Heavy construction, n.e.c.	(S)	1 656	42 934	179 298	150 050	94 311	56 409	29 248	3 166	5	6
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	655	6 408	151 642	570 013	533 764	286 269	255 708	36 249	6 619	3	3
1721	Painting and paper hanging	325	2 354	40 495	113 720	107 312	71 862	36 538	*6 408	3 055	9	8
1731	Electrical work	485	5 103	112 380	372 227	353 398	182 505	176 638	18 829	4 168	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	207	1 848	34 684	105 615	101 868	62 575	39 693	3 747	(S)	6	5
1742	Plastering, drywall, and insulation work	224	5 617	110 723	288 964	273 650	163 143	112 987	15 314	4 219	3	2
1743	Terrazzo, tile, marble, and mosaic work	116	549	9 447	31 325	29 063	17 413	11 722	*2 262	560	11	9
175	Carpentry and floor work:											
1751	Carpentry	309	4 809	99 166	381 462	362 113	172 947	190 451	19 349	4 485	6	4
1752	Floor laying and other floor work	109	684	15 650	63 418	59 752	29 882	30 206	*3 667	(S)	10	12
1761	Roofing, siding, and sheet metal work	214	2 926	51 796	196 653	192 299	102 668	89 871	4 354	2 677	4	4
1771	Concrete work	258	3 574	69 521	247 324	235 189	124 818	111 857	12 135	3 817	6	5
1781	Water well drilling	19	(D)	8 942	(D)	34 341	22 153	12 196	(D)	(D)	(D)	(Z)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	61	1 155	25 259	91 328	79 833	38 796	43 530	11 496	1 909	8	7
1793	Glass and glazing work	83	377	8 429	30 589	30 474	(D)	16 098	*115	(S)	19	19
1794	Excavation work	59	370	8 713	26 876	(D)	20 214	5 397	(D)	2 207	27	(D)
1795	Wrecking and demolition work	*19	(D)	(D)	(D)	(D)	(D)	(D)	(D)	76	(D)	(D)
1796	Installing building equipment, n.e.c.	26	385	12 048	58 433	27 000	18 084	18 084	(D)	(D)	6	(D)
1799	Special trade contractors, n.e.c.	352	3 773	70 171	260 253	199 252	151 566	70 050	*61 001	4 907	11	8
	TUCSON, AZ MSA											
15,16,17	Construction industries	1 377	15 722	324 667	1 674 030	1 190 464	783 248	438 735	483 565	23 672	2	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	243	1 214	17 676	138 032	78 286	42 586	38 141	59 746	(S)	14	15
1522	Other residential buildings	6	236	2 408	(D)	(D)	2 783	5 263	(D)	(D)	10	(D)
1531	Operative builders	33	289	7 984	113 398	68 457	43 147	29 792	44 942	(D)	15	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	19	211	5 455	31 190	14 958	*6 430	8 583	16 233	131	23	30
1542	Nonresidential buildings, n.e.c.	90	1 909	55 409	594 477	298 559	(D)	26 843	295 917	(D)	5	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	25	771	19 298	91 076	75 027	41 972	33 169	16 049	3 393	7	6
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	17	284	7 408	25 056	23 124	15 678	(S)	1 932	(D)	5	4
1629	Heavy construction, n.e.c.	12	486	14 313	63 840	(D)	28 049	26 252	(D)	1 815	4	(D)

AZ—14 ARIZONA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	TUCSON, AZ MSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	175	1 650	36 675	123 585	116 838	62 944	54 975	6 746	1 313	4	4
1721	Painting and paper hanging	84	585	8 932	21 909	20 820	14 710	6 169	*1 090	(S)	16	12
1731	Electrical work	126	1 242	25 998	82 522	79 660	45 270	34 779	(S)	(S)	7	6
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	58	537	9 258	(D)	(D)	15 144	11 664	(D)	(D)	9	(D)
1742	Plastering, drywall, and insulation work	67	1 474	25 753	57 974	56 686	38 310	19 178	(S)	389	7	4
1743	Terrazzo, tile, marble, and mosaic work	(S)	133	1 716	(D)	(D)	2 312	1 665	(D)	(S)	15	(D)
175	Carpentry and floor work:											
1751	Carpentry	83	1 247	21 301	74 553	72 670	35 227	47 034	1 883	(S)	9	8
1752	Floor laying and other floor work ...	20	94	1 344	5 026	4 840	3 156	1 741	186	57	10	4
1761	Roofing, siding, and sheet metal work	83	805	14 378	44 662	43 839	23 256	20 661	(S)	(S)	15	16
1771	Concrete work	75	1 198	23 969	68 273	63 894	37 784	32 731	4 379	1 317	5	5
1781	Water well drilling	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	13	(D)	(D)	16 658	15 890	(D)	(D)	768	(D)	(D)	2
1793	Glass and glazing work	14	111	2 629	10 363	10 212	3 863	6 431	*151	67	9	6
1794	Excavation work	(S)	215	4 283	13 113	11 583	9 108	2 605	1 529	585	13	16
1795	Wrecking and demolition work	1	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ...	(S)	58	959	2 639	2 622	1 774	(D)	17	(D)	(Z)	(Z)
1799	Special trade contractors, n.e.c.	77	748	12 712	42 303	38 675	26 737	13 912	*3 629	2 347	17	16

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Colorado. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 33,075 establishments in this State operating in the construction industries. These establishments accounted for \$11.4 billion in total dollar value of business done.

Most of the 33,075 construction establishments were small. Of the total, 23,371 were nonemployers, and over half of the employer establishments had less than 5 employees. The 3,772 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 82 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$10.7 billion in total dollar value of business done. Of this amount, \$10.6 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$3.1 billion, leaving net value of construction work of \$7.4 billion. In addition, these establishments paid out \$3.6 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$4.3 billion. (See Introduction and appendixes for explanation of terms.)

There were 9,704 establishments with total employment averaging 83,784 during the year. Total payroll for 1992 was \$2.0 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 23,371 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$726 million. Most of these establishments, about 82 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

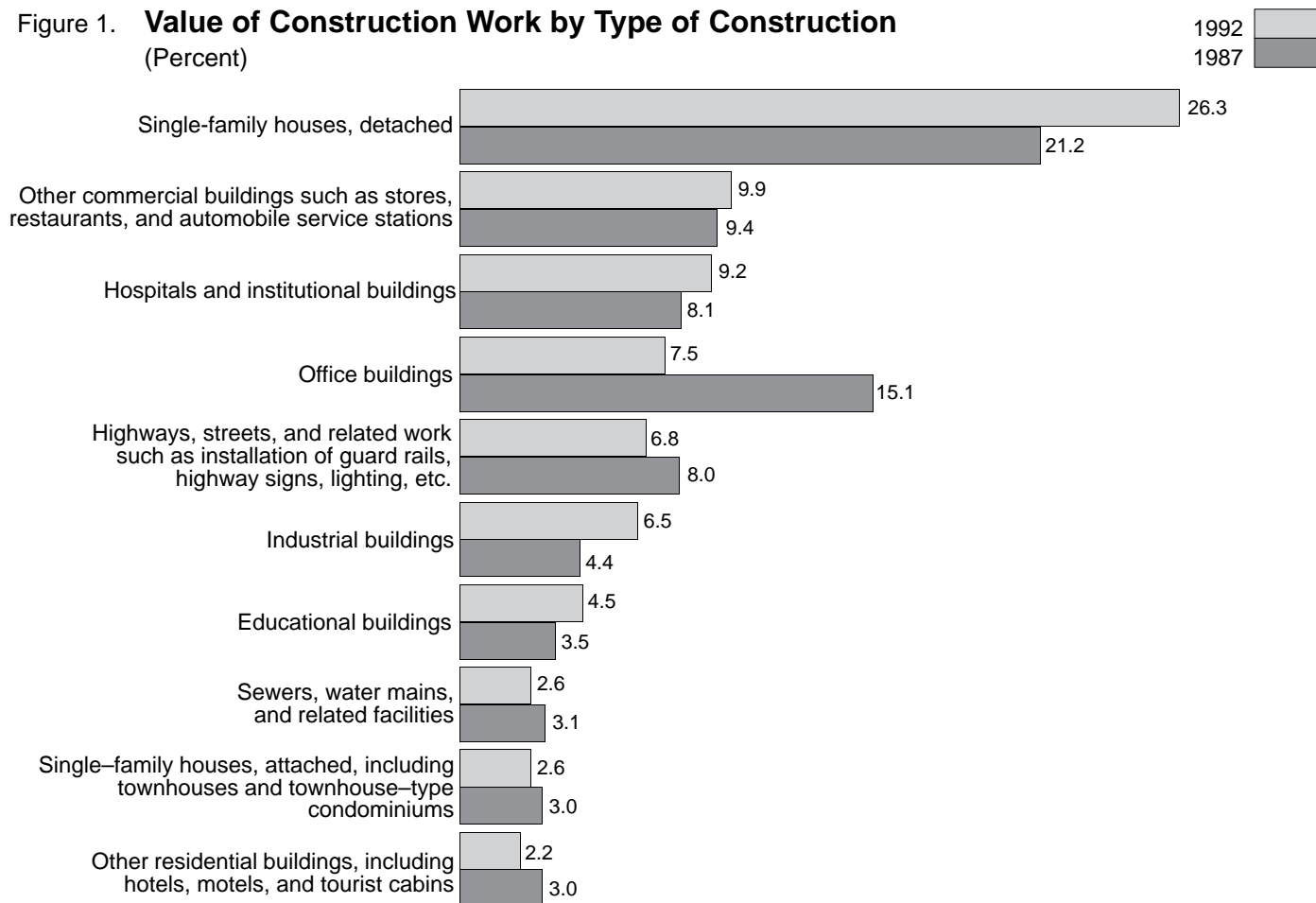


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

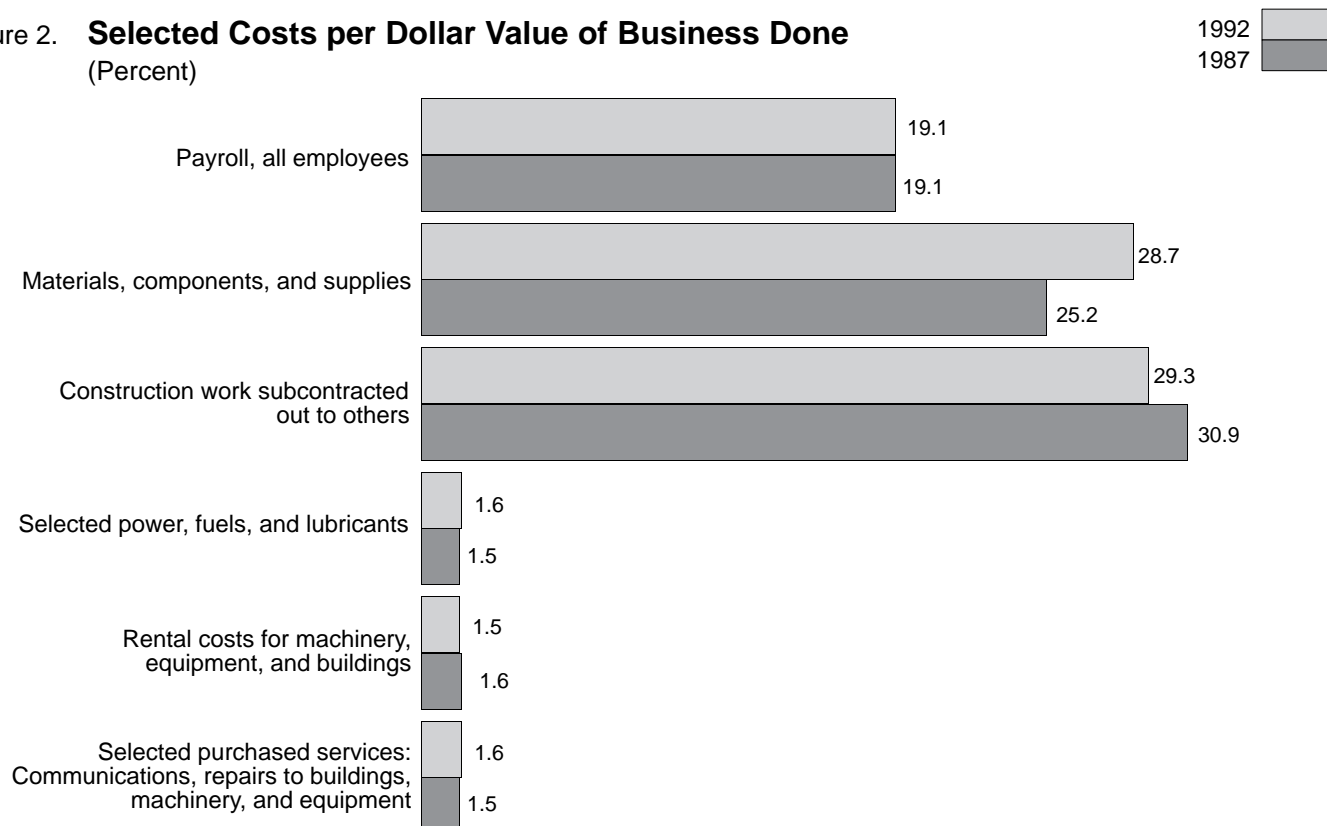


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	33 075	25 985	83 784	11 441 614	23 371	22 773	726 230	9 704	3 212	83 784	10 715 384	1	1
15	Building construction—General contractors and operative builders ----	6 503	4 305	19 046	5 207 583	3 898	3 531	277 378	2 605	774	19 046	4 930 205	2	2
16	Heavy construction other than building construction—contractors -----	1 092	574	14 468	1 959 791	394	394	12 358	698	180	14 468	1 947 433	2	1
17	Special trade contractors -----	25 480	21 105	50 271	4 274 240	19 079	18 848	436 494	6 401	2 257	50 271	3 837 746	1	1
1711	Plumbing, heating, and air-conditioning --	2 483	1 581	9 931	967 901	1 251	1 212	42 986	1 232	369	9 931	924 915	2	2
1731	Electrical work-----	1 826	1 079	9 195	751 717	928	894	23 999	898	(S)	9 195	727 718	2	2
	1987													
15, 16, 17	Construction industries² -----	34 989	27 719	79 961	9 810 596	26 032	25 454	1 224 130	8 957	2 265	79 961	8 586 466	1	1
15	Building construction—General contractors and operative builders ----	7 575	5 316	19 581	4 491 964	5 316	4 842	413 442	2 259	474	19 581	4 078 522	2	2
16	Heavy construction other than building construction—contractors -----	1 106	582	15 293	1 588 961	433	406	23 819	673	176	15 293	1 565 142	2	1
17	Special trade contractors -----	25 452	21 020	44 217	3 265 080	19 600	19 435	520 620	5 852	1 585	44 217	2 744 460	1	1
1711	Plumbing, heating, and air-conditioning --	2 667	1 722	10 225	700 122	1 437	1 401	55 369	1 230	321	10 225	644 753	2	2
1731	Electrical work-----	1 946	1 177	8 173	607 050	1 057	1 031	35 016	889	146	8 173	572 034	2	1

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹-----	9 704	83 784	65 441	2 045 952	1 475 890	10 554 643	7 414 061	4 323 209
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses-----	1 651	6 721	4 793	123 045	79 323	819 920	523 517	274 249
1522	Other residential buildings-----	85	729	494	17 481	9 519	96 312	48 320	28 676
1531	Operative builders-----	251	1 685	490	53 257	10 982	1 139 481	621 545	376 942
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses-----	99	859	584	24 946	15 007	137 253	67 790	37 960
1542	Nonresidential buildings, n.e.c.-----	520	9 052	6 479	271 982	171 984	2 667 086	1 131 482	615 673
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction-----	143	4 746	3 767	140 667	100 755	750 785	591 121	369 867
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction-----	10	358	291	11 614	9 185	73 587	46 677	23 603
1623	Water, sewer, and utility lines-----	212	3 782	3 145	98 554	76 659	401 745	346 314	232 961
1629	Heavy construction, n.e.c.-----	332	5 582	4 627	158 516	128 275	671 582	545 111	324 313
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning-----	1 232	9 931	7 457	258 526	189 184	910 429	808 840	443 663
1721	Painting and paper hanging-----	647	3 048	2 657	51 009	42 501	143 507	133 201	88 968
1731	Electrical work-----	898	9 195	7 332	238 684	185 049	722 211	697 404	398 410
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework-----	306	2 475	2 165	50 857	41 994	145 995	142 615	88 554
1742	Plastering, drywall, and insulation work-----	345	4 236	3 657	88 350	69 527	238 147	226 037	141 767
1743	Terrazzo, tile, marble, and mosaic work-----	75	413	327	10 102	7 832	36 252	33 048	15 830
175	Carpentry and floor work:								
1751	Carpentry-----	730	3 232	2 749	60 659	47 046	249 533	197 512	115 661
1752	Floor laying and other floor work-----	182	1 079	844	24 080	16 736	100 406	83 993	46 990
1761	Roofing, siding, and sheet metal work-----	444	3 996	3 232	82 501	61 299	324 468	303 114	154 924
1771	Concrete work-----	618	5 223	4 481	104 744	81 914	374 771	351 242	200 671
1781	Water well drilling-----	57	289	212	6 262	4 544	24 836	24 482	14 222
179	Miscellaneous special trade contractors:								
1791	Structural steel erection-----	69	1 302	1 087	36 505	28 147	112 709	97 203	67 538
1793	Glass and glazing work-----	71	626	451	15 654	10 922	46 982	46 231	23 211
1794	Excavation work-----	304	1 572	1 298	35 760	28 087	124 330	114 942	84 800
1795	Wrecking and demolition work-----	5	63	47	1 359	1 024	6 618	6 238	4 655
1796	Installing building equipment, n.e.c.-----	45	777	607	23 082	18 583	55 614	54 976	37 480
1799	Special trade contractors, n.e.c.-----	372	2 812	2 168	57 756	39 813	180 084	171 105	111 621

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
3 251 593	3 140 582	3 038 884	164 655	188 740	1 232 264	79 961	8 276 694	3 506 543	1	1	4	15, 16, 17
												15
260 105	296 403	34 392	11 856	7 707	49 076	4 711	492 042	173 665	4	6	15	152
22 811	47 992	*3 134	692	1 076	3 446	987	251 154	52 584	14	13	19	1521
276 918	517 936	864	2 574	4 269	24 286	3 394	866 181	322 709	7	6	19	1531
31 494	69 463	10 395	2 304	1 333	*15 767	1 125	143 897	49 684	6	10	15	154
537 978	1 535 604	52 461	17 666	23 051	99 861	9 364	2 166 885	546 277	3	2	3	1542
												16
242 846	159 663	108 887	29 939	37 962	256 278	5 704	649 841	334 029	3	3	13	1611
(D)	26 910	12 742	937	651	14 770	693	108 254	20 984	(Z)	(Z)	7	162
121 481	55 432	69 665	19 853	13 597	131 684	3 928	301 407	172 548	5	4	11	1622
240 536	126 471	123 211	16 744	17 640	116 366	4 968	463 802	260 700	3	2	20	1623
												17
379 663	101 589	606 648	15 147	12 408	96 237	10 225	634 449	302 483	2	2	17	1711
44 356	10 305	88 721	1 473	3 288	14 598	2 323	100 452	69 868	5	5	20	1721
304 501	24 807	466 795	9 468	11 283	73 415	8 173	566 983	343 119	2	2	10	1731
54 276	3 381	157 990	3 500	6 442	26 514	2 005	99 086	63 318	4	5	21	174
84 848	12 111	229 150	2 965	2 676	17 263	3 718	191 263	113 376	5	5	18	1742
17 792	*3 204	19 219	257	179	2 132	200	14 605	8 385	13	12	34	1743
84 283	52 021	188 949	2 399	(S)	27 589	2 195	155 316	66 603	6	8	(S)	175
38 733	*16 413	87 009	1 437	1 569	8 841	614	53 022	24 450	6	8	16	1751
148 346	21 353	215 231	2 706	4 857	29 843	3 552	210 124	114 338	5	4	8	1761
154 154	23 529	214 405	4 747	8 870	70 345	4 116	216 616	133 900	5	5	14	1771
10 764	354	(D)	294	1 241	15 312	262	16 441	9 099	11	10	5	1781
31 888	15 506	81 290	2 804	1 378	11 696	1 186	92 963	52 324	17	14	25	179
27 406	750	34 379	1 258	787	6 484	630	40 592	23 637	8	7	38	1791
31 144	9 387	97 868	5 361	11 923	62 385	1 580	95 200	69 386	11	9	19	1793
(D)	380	(D)	*790	*213	*4 910	177	6 222	5 295	(Z)	(Z)	65	1794
17 570	638	20 771	1 061	582	4 376	633	53 020	36 798	1	1	(Z)	1795
62 444	8 979	107 663	6 423	9 645	48 791	2 628	150 079	90 153	8	7	20	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	9 704	8 957	9 453	8 509	1	1	1	3
Proprietors and working partners.....	3 212	2 265	3 342	4 936	3	5	4	5
All employees**	83 784	79 961	93 279	74 493	1	1	1	1
Construction workers:								
March.....	57 258	54 594	69 969	53 451	1	1	1	1
May	65 986	61 603	74 916	61 252	1	1	1	1
August	71 489	66 369	80 147	65 647	1	1	1	1
November.....	67 028	61 495	71 698	62 779	1	1	1	1
Average.....	65 441	61 015	75 186	60 828	1	1	1	1
Other employees:								
March.....	17 802	19 252	17 988	13 241	1	1	1	1
May	17 990	18 841	(NA)	(NA)	1	1	(NA)	(NA)
August	18 762	19 027	(NA)	(NA)	1	1	(NA)	(NA)
November.....	18 822	18 662	(NA)	(NA)	1	1	(NA)	(NA)
Average.....	18 344	18 946	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	2 045 952	1 636 597	1 722 473	959 258	1	1	1	1
Payroll, construction workers	1 475 890	1 153 626	1 321 896	740 876	1	1	1	1
Payroll, other employees	570 061	482 971	400 577	218 381	1	1	1	1
First-quarter payroll, all employees	428 142	363 215	390 588	196 773	1	1	1	1
Fringe benefits, all employees	478 455	342 816	313 348	163 751	1	1	1	1
Legally required expenditures.....	347 926	237 656	230 924	92 914	1	1	1	1
Voluntary expenditures.....	130 529	105 159	82 424	70 837	2	1	1	1
Dollar value of business done	10 715 384	8 586 466	8 476 363	4 322 414	1	1	1	1
Value of construction work	10 554 643	8 276 694	8 158 522	4 082 458	1	1	1	1
Value of construction work subcontracted in from others	3 038 884	1 682 988	1 852 754	1 007 565	2	2	3	(Z)
Other business receipts	160 741	169 438	194 044	239 956	4	3	2	2
Net value of construction†	7 414 061	5 626 127	5 873 743	3 046 056	1	1	1	1
Value added††	4 323 209	3 506 543	3 481 803	1 858 813	1	1	1	1
Selected costs.....	6 392 175	4 939 589	4 870 762	2 358 571	1	1	1	1
Materials, components, and supplies	3 080 544	2 163 942	2 451 674	1 260 399	1	2	1	1
Construction work subcontracted out to others	3 140 582	2 650 567	2 284 778	1 036 402	2	1	1	2
Selected power, fuels, and lubricants	171 050	125 079	134 309	61 770	1	1	1	1
Electricity.....	23 409	16 719	16 802	6 543	3	2	2	2
Natural gas	12 928	9 230	9 087	4 638	2	2	2	5
Gasoline and diesel fuel	126 034	90 899	99 649	42 315	2	1	1	1
On highway use.....	86 141	61 385	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use.....	39 893	29 514	(NA)	(NA)	2	3	(NA)	(NA)
Other, including lubricating oils and greases.....	8 679	8 230	8 770	8 274	3	3	3	3
Rental cost for machinery, equipment, and buildings	164 655	138 551	113 516	52 864	3	2	2	1
For machinery and equipment	120 944	96 482	82 501	41 823	3	2	2	2
For buildings.....	43 711	42 068	31 014	11 041	4	2	2	2
Selected purchased services	172 110	129 608	114 697	75 174	3	2	1	1
Communication services	46 833	29 240	26 064	15 569	4	2	2	2
Repairs to buildings and other structures	8 923	7 053	5 693	3 761	7	6	4	4
Repairs to machinery and equipment	116 354	93 314	82 939	55 844	3	2	1	1
Ownership of construction projects:								
Value of construction work	10 554 643	8 276 694	8 158 522	4 082 458	1	1	1	1
Government owned	3 439 609	2 198 061	1 328 860	766 470	2	2	2	1
Federal	1 187 232	890 945	(NA)	(NA)	3	2	(NA)	(NA)
State and local	2 252 376	1 307 116	(NA)	(NA)	3	2	(NA)	(NA)
Privately owned	7 115 034	6 078 632	6 829 662	3 315 988	2	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 115 712	1 185 837	3	2
Capital expenditures, other than land -----	188 740	122 066	4	3
New -----	120 659	87 953	3	3
Used -----	68 081	34 113	8	6
Retirements and disposition of depreciable assets -----	72 188	89 658	5	3
End-of-year gross book value of depreciable assets -----	1 232 264	1 218 245	3	2
Depreciation charges during year -----	133 578	145 495	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	157 884	196 275	9	5
Capital expenditures, other than land -----	12 133	19 198	10	4
New buildings and other structures -----	9 673	16 022	11	4
Used buildings and other structures -----	2 460	3 175	13	15
Retirements and disposition of depreciable assets -----	20 142	13 870	1	11
End-of-year gross book value of depreciable assets -----	149 874	201 603	10	5
Depreciation charges during year -----	11 053	20 220	7	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	957 829	989 562	2	2
Capital expenditures, other than land -----	176 607	102 868	4	3
New machinery and equipment, including automobiles and trucks -----	110 986	71 930	4	3
New automobiles and trucks, intended primarily for highway use -----	40 207	26 856	5	5
Used machinery and equipment, including automobiles and trucks -----	65 621	30 937	8	6
Retirements and disposition of depreciable assets -----	52 046	75 788	6	3
End-of-year gross book value of depreciable assets -----	1 082 391	1 016 641	2	2
Depreciation charges during year -----	122 525	125 275	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	9 704	1
Value of construction work	10 554 643	1
Establishments with inventories:		
Number	3 117	2
Value of construction work	4 561 705	1
Inventories ¹ :		
End of 1992, materials and supplies	119 330	10
End of 1991, materials and supplies	104 118	10
Establishments with no inventories:		
Number	3 669	2
Value of construction work	4 597 871	1
Establishments not reporting:		
Number	2 919	2
Value of construction work	1 395 067	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	9 704	5 933	1 791	1 133	613	156	65	11	1	2	
All employees** -----	83 784	11 319	11 444	14 815	18 036	10 528	9 699	3 696	4 247	(D)	
Payroll, all employees -----	2 045 952	181 932	226 593	320 232	472 598	286 301	300 208	105 971	152 117	(D)	
Dollar value of business done -----	10 715 384	1 291 203	1 002 803	1 375 062	2 284 125	1 291 343	1 656 571	1 814 277	(D)	(D)	
Value of construction work -----	10 554 643	1 274 690	983 239	1 356 720	2 251 305	1 259 332	1 625 963	1 803 394	(D)	(D)	
Net value of construction work† -----	7 414 061	929 551	775 993	1 074 680	1 580 463	903 225	1 064 057	1 086 093	(D)	(D)	
Value added†† -----	4 323 209	496 986	460 173	635 228	896 759	545 334	662 179	195 011	431 540	(D)	
Cost of materials, components, supplies, and fuels -----	3 251 593	449 079	335 384	457 794	716 524	389 902	432 486	470 425	(D)	(D)	
Cost of construction work subcontracted out to others -----	3 140 582	345 139	207 246	282 040	670 842	356 107	561 906	717 301	(D)	(D)	
Rental cost for machinery, equipment, and buildings -----	164 655	13 678	18 796	23 041	42 336	24 756	28 956	13 092	(D)	(D)	
Capital expenditures, other than land -----	188 740	19 525	27 323	31 375	35 695	26 885	42 394	2 726	2 817	(D)	
End-of-year gross book value of depreciable assets -----	1 232 264	142 895	154 524	207 043	259 025	168 087	221 559	39 914	39 218	(D)	
1987											
All employees** -----	79 961	10 351	11 591	13 361	15 070	10 821	9 339	3 193	6 231	(D)	
Value of construction work -----	8 276 694	951 266	876 797	1 056 948	1 498 305	1 152 992	1 322 076	1 418 309	(D)	(D)	
Value added†† -----	3 506 543	385 834	387 091	518 356	643 778	502 915	765 326	(D)	303 241	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	4	5	4	3	2	(Z)	(Z)	(Z)	(D)	
Net value of construction work† -----	1	5	6	4	2	1	(Z)	(Z)	(D)	(D)	
Capital expenditures, other than land -----	4	10	18	16	3	1	(Z)	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	9 704	(S)	(S)	1 259	2 535	1 701	1 253	958	376	184	123
All employees** -----	83 784	(S)	(S)	1 932	7 411	9 031	11 495	14 233	10 845	9 548	18 127
Payroll, all employees -----	2 045 952	(S)	(S)	22 653	105 326	157 732	230 478	340 958	291 513	275 685	611 409
Dollar value of business done -----	10 715 384	(S)	(S)	91 943	412 723	605 143	873 910	1 448 602	1 304 884	1 270 748	4 673 224
Value of construction work -----	10 554 643	(S)	(S)	90 747	406 967	597 139	862 171	1 426 320	1 286 273	1 244 322	4 606 897
Net value of construction work† -----	7 414 061	(S)	(S)	83 130	360 969	526 518	742 805	1 119 435	987 327	893 805	2 669 063
Value added†† -----	4 323 209	(S)	(S)	51 822	215 626	308 257	441 269	634 107	565 417	517 298	1 569 992
Cost of materials, components, supplies, and fuels -----	3 251 593	(S)	(S)	32 503	151 098	226 265	313 275	507 611	440 521	402 934	1 165 398
Cost of construction work subcontracted out to others -----	3 140 582	(S)	(S)	(S)	45 998	70 621	119 366	306 884	298 946	350 517	1 937 834
Rental cost for machinery, equipment, and buildings -----	164 655	(S)	(S)	1 161	5 888	9 310	17 876	26 973	29 368	23 862	49 688
Capital expenditures, other than land -----	188 740	(S)	(S)	2 537	11 505	15 159	22 640	30 998	23 935	28 167	52 898
End-of-year gross book value of depreciable assets -----	1 232 264	(S)	(S)	18 066	73 801	105 481	161 338	179 344	146 923	189 010	349 909
1987											
All employees** -----	79 961	(S)	(S)	(S)	7 781	8 782	9 181	13 911	9 240	9 687	16 972
Value of construction work -----	8 276 694	(S)	(S)	(S)	366 845	498 528	660 533	1 181 723	971 986	954 230	3 504 426
Value added†† -----	3 506 543	(S)	(S)	(S)	211 969	265 901	340 895	565 550	423 227	380 059	1 240 547
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	8	5	6	5	4	3	2	(Z)
Net value of construction work† -----	1	(S)	(S)	6	5	5	5	4	4	3	(Z)
Capital expenditures, other than land -----	4	(S)	(S)	22	14	24	16	15	6	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

CO-10 COLORADO

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	10 554 643	7 343 435	2 084 239	797 522	1	1	2	2
Building construction	7 961 139	5 787 543	1 631 930	541 666	1	1	2	3
Single-family houses	3 050 335	2 535 989	336 129	178 218	3	3	5	5
Single-family houses, detached	2 775 243	2 320 817	308 198	146 227	3	3	5	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	275 093	215 171	27 931	31 991	4	5	10	9
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	184 180	97 064	41 904	45 212	5	7	10	8
Other residential buildings, including hotels, motels, and tourist cabins	235 881	179 834	42 881	13 165	3	4	6	10
Hotels, motels, and tourist cabins	161 424	130 722	21 615	9 087	3	3	11	10
Other residential buildings	74 457	49 112	21 266	4 078	9	13	5	25
Office buildings	786 964	375 271	325 421	86 272	3	2	5	6
Other commercial buildings such as stores, restaurants, and automobile service stations	1 045 249	729 880	233 841	81 528	3	4	5	7
Industrial buildings and warehouses	793 331	535 456	187 241	70 635	2	2	4	9
Industrial buildings	684 177	472 086	161 191	50 900	2	2	4	7
Warehouses	109 155	63 371	26 049	19 735	6	7	9	19
Religious buildings	86 454	43 790	32 590	10 073	8	4	20	8
Educational buildings	479 563	296 190	160 614	22 759	7	9	10	6
Hospitals and institutional buildings	970 390	733 659	215 785	20 946	1	(Z)	5	7
Amusement, social, and recreational buildings, indoors	86 920	52 630	29 140	5 150	15	23	7	13
Other nonresidential buildings	241 871	207 780	26 383	7 709	6	7	7	20
Nonbuilding construction	2 264 058	1 555 893	452 309	255 856	1	2	2	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	720 294	362 564	244 955	112 776	3	6	2	7
Airport runways and related work	138 422	129 095	7 111	(S)	1	1	5	(S)
Private driveways and parking areas	59 430	32 379	13 805	13 246	16	15	36	25
Bridges, tunnels, and elevated highways	141 349	133 503	5 677	2 169	1	1	2	6
Conservation and development construction	93 115	62 084	9 214	21 817	9	12	26	10
Power and communication transmission lines, towers, and related facilities	190 252	123 061	48 554	18 638	4	5	3	7
Sewers, water mains, and related facilities	275 670	196 678	53 923	25 068	5	7	6	11
Sewers, sewer lines, septic systems, and related facilities	135 097	93 155	31 142	10 801	7	9	9	20
Water mains and related facilities	140 572	103 524	22 781	14 267	7	9	7	11
Pipeline construction other than sewer or water lines	118 850	85 559	17 199	16 092	6	6	5	11
Blast furnaces, petroleum refineries, chemical complexes, etc.	97 223	70 946	12 929	13 348	1	(Z)	1	9
Power plants	132 118	115 093	12 406	4 619	2	1	7	16
Sewage treatment and water treatment plants	135 678	122 779	10 105	2 794	3	3	3	22
Sewage treatment plants	68 507	58 310	8 195	2 002	6	6	1	30
Water treatment plants	67 171	64 469	1 910	792	1	1	14	13
Other nonbuilding construction	161 657	122 151	16 431	23 074	6	5	10	21
Construction work, n.s.k.	329 447	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
1987								
Value of construction work	8 276 694	5 972 143	1 406 918	630 761	1	1	2	2
Building construction	6 189 324	4 758 833	1 000 673	424 597	1	2	3	3
Single-family houses	1 998 073	1 659 546	207 244	131 282	3	3	6	6
Single-family houses, detached	1 753 432	1 449 957	190 111	113 364	3	3	7	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	244 641	209 589	17 133	17 918	6	7	7	5
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	258 896	209 633	23 464	25 798	4	5	16	6
Other residential buildings, including hotels, motels, and tourist cabins	244 604	179 932	42 928	21 742	5	4	17	13
Hotels, motels, and tourist cabins	157 796	131 434	18 397	7 964	4	4	21	9
Other residential buildings	86 808	48 498	24 531	13 778	10	8	25	19
Office buildings	1 251 239	965 903	214 568	70 767	1	1	4	3
Other commercial buildings such as stores, restaurants, and automobile service stations	780 967	528 353	176 015	76 598	7	10	5	7
Industrial buildings and warehouses	493 110	341 305	108 373	43 432	2	2	3	6
Industrial buildings	366 563	247 867	85 410	33 286	2	2	3	8
Warehouses	126 547	93 438	22 963	10 146	3	3	9	7
Religious buildings	87 616	57 046	23 880	6 689	7	8	15	10
Educational buildings	286 287	196 605	71 715	17 966	3	4	6	8
Hospitals and institutional buildings	671 901	544 648	103 079	24 173	1	1	6	8
Amusement, social, and recreational buildings, indoors	43 650	30 547	9 799	3 302	12	11	22	7
Other nonresidential buildings	72 976	46 865	19 602	6 507	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	1 820 494	1 211 753	406 245	202 495	1	1	1	6
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	665 114	314 849	257 453	92 811	2	2	1	11
Private driveways and parking areas	25 131	13 559	5 391	6 180	15	17	9	32
Bridges, tunnels, and elevated highways	122 090	106 168	13 139	2 783	2	1	4	19
Conservation and development construction	46 356	34 674	6 881	4 800	7	7	17	35
Power and communication transmission lines, towers, and related facilities	167 487	99 661	51 488	16 337	3	3	2	7
Sewers, water mains, and related facilities	252 644	215 993	24 661	11 990	4	4	12	12
Sewers, sewer lines, septic systems, and related facilities	121 993	102 283	13 573	6 136	7	8	16	16
Water mains and related facilities	130 651	113 709	11 087	5 853	4	4	14	13
Pipeline construction other than sewer or water lines	64 785	56 965	3 715	4 104	6	6	24	6
Blast furnaces, petroleum refineries, chemical complexes, etc.	89 440	73 780	5 437	10 222	3	(Z)	2	23
Power plants	45 944	40 043	1 219	4 681	4	1	11	35
Sewage treatment and water treatment plants	74 304	61 079	8 548	4 676	5	5	24	10
Sewage treatment plants	29 499	20 235	5 263	3 999	6	7	12	11
Water treatment plants	44 805	40 844	*3 284	676	6	5	45	14
Other nonbuilding construction	267 199	194 981	28 313	43 910	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	266 862	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	9 704	65 441	57 258	65 986	71 489	67 028	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	1 651	4 793	4 136	4 772	5 318	4 944	3	4	5	4	5	5
1522	Other residential buildings -----	85	494	444	463	549	519	21	14	15	13	13	15
1531	Operative builders -----	251	490	412	494	525	531	11	13	13	13	12	13
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	99	584	592	504	565	675	16	6	7	6	6	6
1542	Nonresidential buildings, n.e.c. ----	520	6 479	6 032	6 150	6 981	6 754	7	3	3	3	3	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	143	3 767	2 482	4 240	4 739	3 605	11	3	3	4	4	4
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	10	291	237	295	341	290	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	212	3 145	2 335	3 182	3 576	3 489	10	4	4	4	5	5
1629	Heavy construction, n.e.c. -----	332	4 627	4 487	4 879	4 547	4 597	9	3	3	3	4	3
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 232	7 457	6 797	7 487	7 851	7 695	3	3	2	3	3	3
1721	Painting and paper hanging -----	647	2 657	2 119	2 856	3 174	2 479	4	5	5	5	6	5
1731	Electrical work -----	898	7 332	6 635	7 027	7 808	7 856	3	2	3	2	3	3
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	306	2 165	1 910	2 109	2 428	2 213	5	5	6	5	7	5
1742	Plastering, drywall, and insulation work -----	345	3 657	3 564	3 686	3 964	3 413	6	5	4	7	5	5
1743	Terrazzo, tile, marble, and mosaic work -----	75	327	296	304	365	343	22	12	11	11	15	12
175	Carpentry and floor work:												
1751	Carpentry -----	730	2 749	2 518	2 698	2 993	2 787	5	6	7	6	6	7
1752	Floor laying and other floor work --	182	844	817	788	900	870	6	6	6	6	8	7
1761	Roofing, siding, and sheet metal work -----	444	3 232	2 932	3 152	3 375	3 468	5	5	4	4	6	6
1771	Concrete work -----	618	4 481	3 474	4 659	5 211	4 580	5	5	5	5	5	6
1781	Water well drilling -----	57	212	203	206	233	207	10	9	10	9	9	9
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	69	1 087	980	1 218	1 147	1 002	17	18	16	22	18	17
1793	Glass and glazing work -----	71	451	419	431	430	524	9	7	6	8	8	7
1794	Excavation work -----	304	1 298	1 076	1 347	1 409	1 361	10	11	11	11	11	12
1795	Wrecking and demolition work -----	5	47	44	38	53	52	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1796	Installing building equipment, n.e.c. -----	45	607	505	501	645	777	17	1	3	1	1	1
1799	Special trade contractors, n.e.c. ----	372	2 168	1 812	2 501	2 363	1 996	9	8	8	9	8	8

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.6	24.4	161.3	.194	.308	.298	.288	.016
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.1	18.3	171.1	.150	.317	.362	.042	.014
1522	Other residential buildings -----	8.6	24.0	195.0	.182	.237	.498	*.033	.007
1531	Operative builders -----	6.7	31.6	2 325.5	.047	.243	.455	.001	.002
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	8.7	29.0	235.0	.182	.229	.506	.076	.017
1542	Nonresidential buildings, n.e.c. -----	17.4	30.0	411.7	.102	.202	.576	.020	.007
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	33.1	29.6	199.3	.187	.323	.213	.145	.040
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	35.8	32.4	252.9	.158	(D)	.366	.173	.013
1623	Water, sewer, and utility lines -----	17.8	26.1	127.7	.245	.302	.138	.173	.049
1629	Heavy construction, n.e.c. -----	16.8	28.4	145.1	.236	.358	.188	.183	.025
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.1	26.0	122.1	.284	.417	.112	.666	.017
1721	Painting and paper hanging -----	4.7	16.7	54.0	.355	.309	.072	.618	.010
1731	Electrical work -----	10.2	26.0	98.5	.330	.422	.034	.646	.013
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	8.1	20.5	67.4	.348	.372	.023	(S)	.024
1742	Plastering, drywall, and insulation work -----	12.3	20.9	65.1	.371	.356	.051	.962	.012
1743	Terrazzo, tile, marble, and mosaic work -----	5.5	24.5	110.9	.279	.491	*.088	.530	.007
175	Carpentry and floor work:								
1751	Carpentry -----	4.4	18.8	90.8	.243	.338	.208	.757	.010
1752	Floor laying and other floor work -----	5.9	22.3	119.0	.240	.386	*.163	.867	.014
1761	Roofing, siding, and sheet metal work -----	9.0	20.6	100.4	.254	.457	.066	.663	.008
1771	Concrete work -----	8.5	20.1	83.6	.279	.411	.063	.572	.013
1781	Water well drilling -----	5.1	21.7	117.2	.252	.433	.014	(D)	.012
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	18.8	28.0	103.7	.324	.283	.138	.721	.025
1793	Glass and glazing work -----	8.8	25.0	104.2	.333	.583	.016	.732	.027
1794	Excavation work -----	5.2	22.7	95.8	.288	.250	.076	.787	.043
1795	Wrecking and demolition work -----	12.6	21.6	140.8	.205	(D)	.057	(D)	.119
1796	Installing building equipment, n.e.c. -----	17.3	29.7	91.6	.415	.316	.011	.373	.019
1799	Special trade contractors, n.e.c. -----	7.6	20.5	83.1	.321	.347	.050	.598	.036

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	DENVER–BOULDER–GREELEY, CO CMSA											
15,16, 17	Construction industries	5 285	51 513	1 322 039	7 207 403	4 878 447	2 814 076	2 145 095	2 328 955	108 587	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S) 46	2 940 506	52 435 12 244	338 701 69 647	225 892 33 099	113 199 18 348	118 241 16 483	112 809 36 548	3 782 903	6 16	9 16
1522	Other residential buildings											
1531	Operative builders	138	1 175	41 038	917 402	496 191	318 821	195 170	421 211	3 643	6	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	70	591	19 774	113 604	(D)	27 054	26 191	(D)	1 108	9	(D)
1542	Nonresidential buildings, n.e.c.	338	6 415	205 468	2 128 555	916 754	503 819	417 012	1 211 801	20 958	3	1
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	56	2 454	77 621	467 406	353 224	209 921	154 757	114 182	15 146	2	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	7	264	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1623	Water, sewer, and utility lines	98	2 135	58 813	244 682	(D)	137 258	71 917	(D)	10 096	5	(D)
1629	Heavy construction, n.e.c.	108	1 605	44 387	248 352	171 846	85 292	91 521	76 506	3 621	5	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	712	6 057	164 687	582 801	509 222	281 682	239 024	73 579	7 528	3	3
1721	Painting and paper hanging.....	369	2 016	37 482	100 892	93 403	63 559	29 924	7 489	2 634	5	5
1731	Electrical work	490	6 555	180 048	540 601	520 636	293 888	229 941	19 965	6 449	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work.....	163	1 486	29 423	86 075	83 626	53 610	30 101	2 449	3 941	7	8
1742	Plastering, drywall, and insulation work	203	2 834	57 464	152 402	143 280	91 092	52 465	9 121	1 948	6	5
1743	Terrazzo, tile, marble, and mosaic work	58	381	9 589	(D)	(D)	14 284	16 091	(D)	(D)	14	(D)
175	Carpentry and floor work:											
1751	Carpentry	401	1 920	38 274	173 328	126 597	68 214	60 163	46 731	2 125	7	11
1752	Floor laying and other floor work	119	891	20 975	87 501	71 581	40 475	32 631	*15 920	(S)	7	10
1761	Roofing, siding, and sheet metal work	296	2 901	65 164	243 847	228 917	114 063	115 003	14 929	2 583	4	4
1771	Concrete work	338	3 402	71 238	251 357	233 119	130 373	105 860	18 237	4 525	6	7
1781	Water well drilling	18	135	(D)	(D)	(D)	(D)	(D)	(D)	(D)	21	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	29	742	23 098	58 674	53 564	37 688	17 263	5 110	*767	28	24
1793	Glass and glazing work	48	491	12 389	(D)	(D)	17 899	22 217	(D)	757	9	(D)
1794	Excavation work	129	804	20 342	64 148	58 245	46 019	12 828	5 903	5 519	13	10
1795	Wrecking and demolition work	5	63	1 359	6 618	6 238	4 655	380	380	213	(Z)	(Z)
1796	Installing building equipment, n.e.c.	30	673	21 981	52 177	(D)	35 386	16 431	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c.	252	2 078	44 484	136 987	129 769	84 257	47 633	7 219	7 439	7	8
	Boulder–Longmont, CO PMSA											
15,16, 17	Construction industries	723	4 956	111 408	576 070	417 652	232 750	196 786	158 418	10 540	3	6
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	178	624	10 078	(D)	(D)	(D)	(D)	24 457	961	10	(D)
1522	Other residential buildings	*15	103	2 906	19 351	(D)	4 962	5 297	(D)	(D)	29	(D)
1531	Operative builders	28	163	7 093	(D)	(D)	*30 539	34 823	(D)	*1 470	17	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(D)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)
1542	Nonresidential buildings, n.e.c.	66	(D)	(D)	(D)	(D)	20 741	(D)	(D)	(D)	(D)	(D)
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	7	183	3 786	23 091	(D)	11 936	(D)	(D)	(D)	(Z)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	8	195	(D)	18 830	17 702	11 517	6 442	1 128	335	(Z)	(Z)
1629	Heavy construction, n.e.c.	13	(D)	5 092	27 235	23 704	12 939	10 843	(S)	(D)	(D)	14

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	DENVER–BOULDER–GREELEY, CO CMSA—Con.											
	Boulder–Longmont, CO PMSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	84	675	16 426	(D)	(D)	24 885	(D)	5 818	806	9	(D)
1721	Painting and paper hanging	46	255	4 004	12 660	12 099	8 786	3 324	*562	(D)	11	9
1731	Electrical work	64	595	14 035	38 551	37 314	23 038	14 367	1 238	(S)	8	6
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	135	2 673	8 123	(D)	4 940	2 601	(D)	(D)	31	(D)
1742	Plastering, drywall, and insulation work	19	85	1 573	(D)	(D)	2 329	2 109	(D)	44	6	(D)
1743	Terrazzo, tile, marble, and mosaic work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	235	(D)	9 586	(D)	5 161	3 087	(D)	(D)	9	(D)
1752	Floor laying and other floor work	16	86	(D)	6 068	(D)	3 104	2 557	(D)	75	6	(D)
1761	Roofing, siding, and sheet metal work	25	411	8 944	33 566	(D)	17 118	15 327	(D)	802	12	(D)
1771	Concrete work	29	140	3 070	12 424	11 945	7 202	4 761	*479	*292	35	26
1781	Water well drilling	3	(D)	(D)	(D)	(D)	930	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	—	—	—	—	—	—	—	—	—	—	—
1793	Glass and glazing work	2	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1794	Excavation work	15	81	1 651	7 045	(D)	4 362	*2 236	(D)	(D)	30	(D)
1795	Wrecking and demolition work	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c.	—	—	—	—	—	—	—	—	—	—	—
1799	Special trade contractors, n.e.c.	33	287	4 640	10 730	(D)	8 760	2 567	(D)	(D)	13	(D)
	Denver, CO PMSA											
15,16,17	Construction industries	4 285	42 844	1 104 777	5 624 658	3 848 563	2 221 228	1 693 715	1 776 095	89 801	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	2 253	41 066	(D)	(D)	(D)	(D)	86 649	2 254	7	(D)
1522	Other residential buildings	31	402	9 338	50 296	(D)	13 386	(S)	(D)	(D)	18	(D)
1531	Operative builders	106	1 002	33 220	(D)	(D)	288 308	154 117	(D)	2 173	6	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	62	575	19 262	(D)	(D)	25 902	21 752	(D)	(D)	9	(D)
1542	Nonresidential buildings, n.e.c.	262	4 187	129 954	1 225 089	425 241	(D)	218 653	799 848	18 797	4	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	43	1 985	64 882	388 374	(D)	177 992	130 181	(D)	12 775	3	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	7	264	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
1623	Water, sewer, and utility lines	76	1 781	49 242	209 051	173 891	116 317	59 101	35 160	7 255	6	4
1629	Heavy construction, n.e.c.	91	1 278	36 598	(D)	(D)	(D)	78 817	(D)	2 023	6	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	588	5 186	144 535	514 272	446 919	250 829	207 391	67 352	6 603	3	3
1721	Painting and paper hanging	301	1 711	32 871	86 716	79 824	53 782	26 110	*6 892	2 292	6	6
1731	Electrical work	405	5 896	165 060	497 014	478 329	268 492	212 937	18 685	5 417	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	123	1 173	24 204	70 447	68 619	(D)	25 481	1 828	3 701	7	8
1742	Plastering, drywall, and insulation work	167	2 644	54 204	141 697	133 217	85 000	48 493	8 480	1 612	6	6
1743	Terrazzo, tile, marble, and mosaic work	55	(D)	(D)	30 352	(D)	(D)	(D)	(D)	*113	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	352	1 671	34 543	(D)	(D)	(D)	(D)	45 297	1 950	8	(D)
1752	Floor laying and other floor work	96	780	18 507	(D)	(D)	(D)	29 265	*15 328	(S)	8	(D)
1761	Roofing, siding, and sheet metal work	(S)	2 209	48 861	(D)	(D)	(D)	91 645	13 122	1 438	5	(D)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

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Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	DENVER–BOULDER–GREELEY, CO CMSA—Con.											
	Denver, CO PMSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1771	Concrete work	278	3 020	63 333	219 577	203 782	113 686	93 176	15 795	3 715	6	7
1781	Water well drilling	*12	101	2 942	10 736	10 559	7 156	3 403	177	(D)	27	21
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	28	(D)	(D)	(D)	(D)	(D)	(D)	5 110	(D)	(D)	(D)
1793	Glass and glazing work	45	473	(D)	35 853	(D)	17 124	(D)	(D)	(D)	10	(D)
1794	Excavation work	109	682	17 728	54 491	49 077	39 730	9 927	5 414	5 162	14	11
1795	Wrecking and demolition work	5	63	1 359	6 618	6 238	4 655	(D)	380	213	(Z)	(Z)
1796	Installing building equipment, n.e.c.	30	673	21 981	52 177	(D)	35 386	16 431	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c.	191	1 736	38 596	122 097	115 205	73 511	(D)	6 893	(D)	9	9
	Greeley, CO PMSA											
15,16,17	Construction industries	276	3 714	105 854	1 006 674	612 232	360 099	254 594	394 442	8 247	4	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	63	1 290	(D)	(D)	2 589	(D)	(S)	*567	25	(D)
1522	Other residential buildings	—	—	—	—	—	—	—	—	—	—	—
1531	Operative builders	(S)	(S)	(S)	(D)	(D)	(S)	(S)	(D)	—	(S)	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(D)	(S)	(D)	(D)	(D)	(S)	(D)	—	(D)	(D)
1542	Nonresidential buildings, n.e.c.	*10	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	6	286	8 953	55 940	(D)	19 993	(D)	(D)	(D)	9	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	(S)	158	(D)	16 800	(D)	9 425	6 374	(D)	2 506	24	(D)
1629	Heavy construction, n.e.c.	4	(D)	2 697	(D)	(D)	(D)	1 861	(D)	(D)	(D)	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	40	196	3 726	(D)	(D)	5 967	(D)	*409	119	35	(D)
1721	Painting and paper hanging	*23	*51	*607	*1 516	*1 481	*991	*489	*36	(D)	57	48
1731	Electrical work	*21	*65	953	*5 036	*4 993	*2 358	*2 637	(S)	226	41	45
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	*16	178	2 547	7 505	(D)	(D)	2 019	(D)	(D)	23	(D)
1742	Plastering, drywall, and insulation work	*17	*105	*1 687	(D)	(D)	*3 763	*1 863	(D)	*292	46	(D)
1743	Terrazzo, tile, marble, and mosaic work	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(S)	(D)
1752	Floor laying and other floor work	(S)	26	(D)	(D)	(D)	(D)	809	(D)	(S)	(Z)	(D)
1761	Roofing, siding, and sheet metal work	*6	280	7 358	(D)	(D)	(D)	8 032	(D)	343	16	(D)
1771	Concrete work	31	242	4 835	19 356	17 392	9 485	7 923	1 963	*519	29	30
1781	Water well drilling	(S)	(D)	(S)	(S)	(S)	(D)	(S)	(S)	(S)	(D)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
1793	Glass and glazing work	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work	*6	*42	*963	*2 612	(D)	*1 926	*664	(D)	(D)	70	(D)
1795	Wrecking and demolition work	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c.	—	—	—	—	—	—	—	—	—	—	—
1799	Special trade contractors, n.e.c.	*28	55	1 248	4 160	(D)	1 985	(D)	(D)	(S)	30	(D)

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

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-- Not applicable for this report.

Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Idaho. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 11,616 establishments in this State operating in the construction industries. These establishments accounted for \$2.6 billion in total dollar value of business done.

Most of the 11,616 construction establishments were small. Of the total, 8,075 were nonemployers, and over half of the employer establishments had less than 5 employees. The 1,143 construction establishments with 5 employees or more, while representing only 10 percent of all establishments, accounted for more than 72 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$2.4 billion in total dollar value of business done. Of this amount, \$2.3 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$552 million, leaving net value of construction work of \$1.7 billion. In addition, these establishments paid out \$880 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$1.0 billion. (See Introduction and appendixes for explanation of terms.)

There were 3,541 establishments with total employment averaging 22,217 during the year. Total payroll for 1992 was \$479 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 8,075 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$269 million. Most of these establishments, about 80 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992
1987

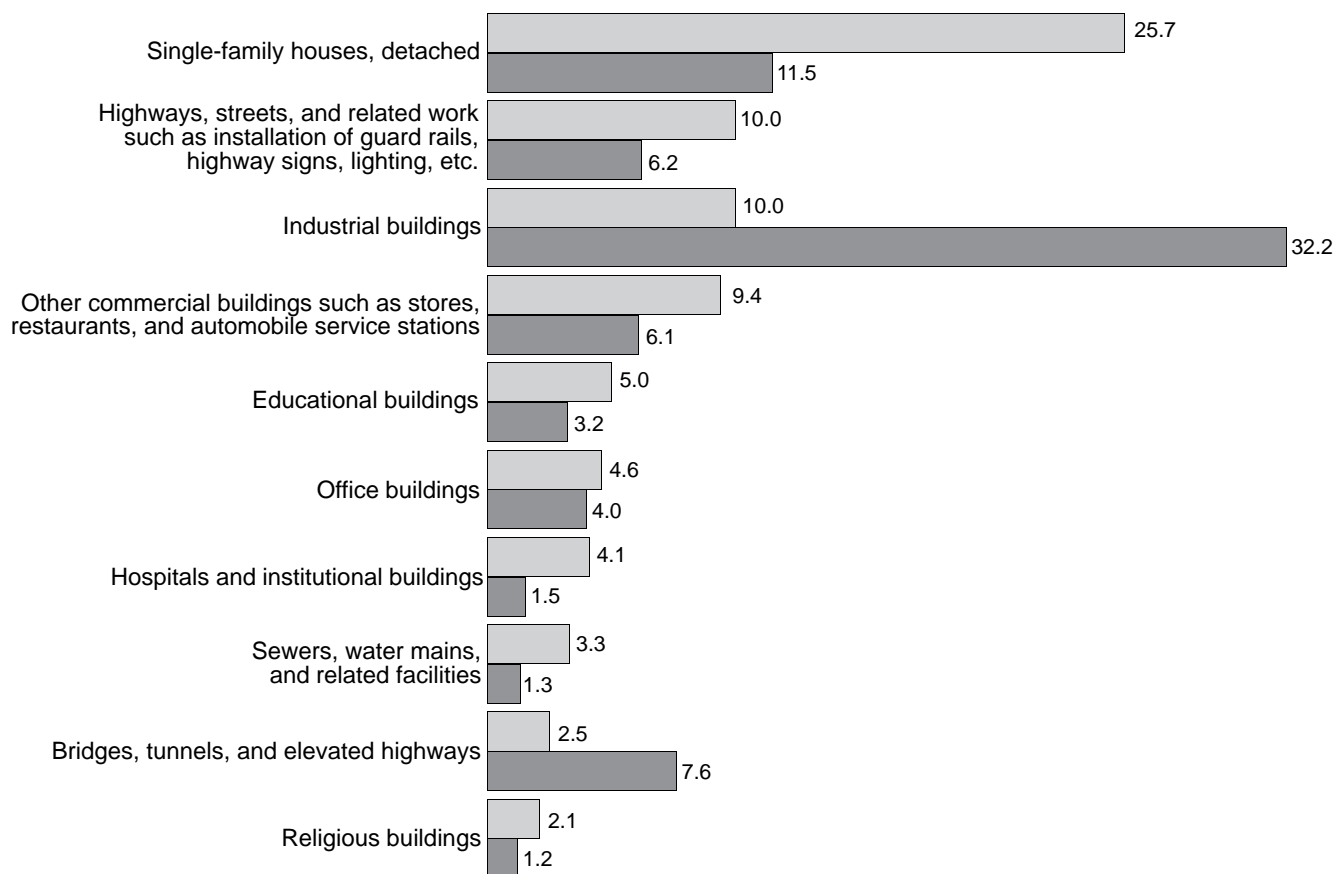


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992
1987

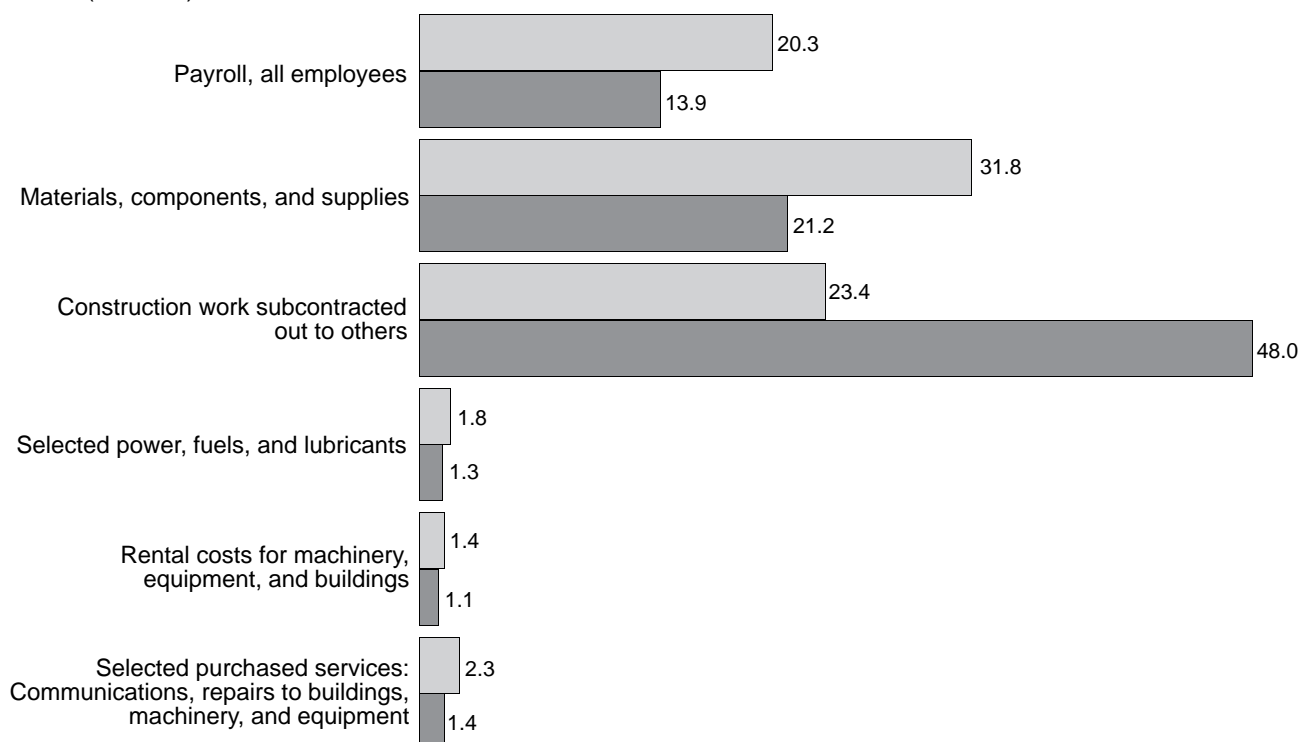


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	11 616	10 351	22 217	2 626 760	8 075	8 152	268 534	3 541	2 199	22 217	2 358 226	2	2
15	Building construction—General contractors and operative builders ----	2 532	2 058	6 168	1 113 692	1 395	1 399	114 629	1 137	659	6 168	999 063	4	3
16	Heavy construction other than building construction— contractors-----	465	307	4 848	530 286	190	185	5 146	275	122	4 848	525 140	3	3
17	Special trade contractors -----	8 619	7 986	11 202	982 782	6 490	6 568	148 759	2 129	(S)	11 202	834 023	3	3
1711	Plumbing, heating, and air-conditioning --	716	514	3 131	282 703	320	321	12 699	396	(S)	3 131	270 004	4	4
1731	Electrical work-----	705	591	1 635	147 114	432	437	11 981	273	154	1 635	135 133	6	5
	1987													
15, 16, 17	Construction industries² -----	10 370	8 863	13 847	2 328 129	8 278	8 258	332 024	2 092	605	13 847	1 996 105	2	1
15	Building construction—General contractors and operative builders ----	2 334	1 834	4 727	1 409 886	1 806	1 741	121 540	528	93	4 727	1 288 346	3	2
16	Heavy construction other than building construction— contractors-----	417	282	2 522	315 383	208	212	14 813	209	70	2 522	300 570	4	3
17	Special trade contractors -----	7 369	6 541	6 527	575 317	6 047	6 101	170 193	1 322	440	6 527	405 124	1	5
1711	Plumbing, heating, and air-conditioning --	626	440	1 657	137 985	333	331	17 848	293	109	1 657	120 137	5	5
1731	Electrical work-----	695	530	1 116	80 972	477	477	16 213	218	53	1 116	64 759	7	10

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	3 541	22 217	17 252	479 350	343 681	2 261 464	1 709 621	1 014 179
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	774	2 494	1 917	39 450	28 376	298 742	204 612	99 180
1522	Other residential buildings -----	23	122	*76	2 440	1 177	24 810	13 470	4 661
1531	Operative builders -----	123	291	172	7 608	3 277	(S)	(S)	(S)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	45	596	424	15 681	10 161	102 312	53 591	30 119
1542	Nonresidential buildings, n.e.c. -----	172	2 664	1 928	65 113	39 395	441 583	204 610	117 666
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	76	2 016	1 651	49 216	38 248	222 451	180 937	133 212
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	4	100	81	2 877	2 252	12 181	10 544	5 796
1623	Water, sewer, and utility lines -----	54	795	678	21 348	16 296	69 546	62 595	44 954
1629	Heavy construction, n.e.c. -----	141	1 937	1 203	52 775	31 467	181 443	(D)	100 918
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	396	3 131	2 360	71 046	53 330	267 366	250 144	131 171
1721	Painting and paper hanging -----	191	532	466	7 879	6 631	25 904	25 238	17 543
1731	Electrical work -----	273	1 635	1 297	41 880	31 997	133 906	130 806	76 451
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	106	(D)	448	9 863	(D)	29 782	29 233	15 776
1742	Plastering, drywall, and insulation work -----	143	966	872	16 285	13 696	53 951	48 002	28 704
1743	Terrazzo, tile, marble, and mosaic work -----	37	*122	*110	*1 802	*1 541	7 431	7 192	3 793
175	Carpentry and floor work:								
1751	Carpentry -----	272	844	724	11 893	10 180	47 182	40 620	26 583
1752	Floor laying and other floor work -----	42	82	73	904	831	4 151	3 964	2 166
1761	Roofing, siding, and sheet metal work -----	165	987	811	14 901	11 721	68 548	65 184	28 735
1771	Concrete work -----	195	859	769	14 688	12 271	62 073	59 096	38 683
1781	Water well drilling -----	44	202	156	4 533	3 820	20 852	19 928	11 473
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	27	198	158	4 970	3 335	15 091	13 662	9 596
1793	Glass and glazing work -----	20	132	86	2 350	1 489	9 865	9 817	5 341
1794	Excavation work -----	83	272	233	4 574	3 756	21 956	19 349	17 330
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	6	115	70	(D)	1 579	(D)	9 135	(D)
1799	Special trade contractors, n.e.c. -----	127	(D)	(D)	(D)	8 654	41 954	39 193	24 556

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
792 204	551 842	587 742	33 937	54 465	413 638	13 847	1 723 338	585 196	2	2	6	15, 16, 17
												15
114 264 *8 869	94 130 11 340	10 354 (S)	1 745 *433	2 096 *145	13 442 415	1 025 (S)	91 375 (S)	32 040 (S)	8 39	9 35	26 66	152 1521 1522
32 585	23 778	(S)	129	429	*8 163	*132	23 941	*5 171	19	(S)	20	1531
26 607 116 244	48 721 236 974	2 753 10 637	613 2 907	530 3 950	8 392 42 427	2 238 1 253	(D) 202 591	134 661 51 386	9 7	10 6	21 35	154 1541 1542
												16
63 703	41 514	38 785	8 092	16 675	147 690	1 060	107 029	60 554	4	4	6	1611
4 919 18 534 (D)	1 637 6 952 (D)	156 7 816 10 180	86 (S) 5 477	(D) 6 370 5 170	6 082 34 090 34 674	155 591 716	19 087 35 480 101 159	10 029 22 939 50 969	(Z) 10 7	(Z) 8 (D)	(D) 25 29	162 1622 1623 1629
												17
121 612	17 222	180 767	2 325	5 800	38 057	1 657	116 977	60 991	4	5	23	1711
7 695	666	16 293	348	*705	3 442	224	8 146	5 105	14	11	48	1721
55 582	3 100	97 449	2 021	3 144	12 127	1 116	61 817	35 589	6	6	20	1731
13 457 19 468 *3 445	550 5 948 239	26 716 45 755 *8 643	351 856 *99	(D) 465 *86	4 841 4 431 593	247 675 *93	11 543 40 875 4 462	5 612 18 477 *2 962	(D) 7 43	12 10 39	(D) 17 46	174 1741 1742 1743
15 633 (D)	6 562 187	24 333 3 297	288 58	748 142	4 277 835	297 *74	16 062 5 549	8 757 *1 840	10 (Z)	10 (Z)	21 (Z)	175 1751 1752
37 918	3 363	31 227	746	*895	*9 575	983	57 472	27 576	13	15	54	1761
(D)	(S)	25 895	(S)	1 478	11 059	385	22 063	12 178	13	14	37	1771
8 455	*924	*2 205	*640	1 095	7 369	*64	2 693	*2 362	10	15	26	1781
4 781 5 526 3 555 (D) (D) 14 710	1 428 (S) *2 607 (D) (D) *2 760	*4 845 5 256 17 822 (D) (D) 5 922 (D)	*843 108 558 (D) (D) (D) 360	265 70 1 907 (D) (D) 116 538	4 427 568 10 521 (D) (D) (D) 3 557	153 84 (S) (S) (D) (D) (S)	7 877 6 439 (D) (D) (D) 6 135 (S)	6 195 3 198 (S) (D) (D) 3 167 (S)	31 9 26 (D) (Z) (D) 22	28 12 23 (D) (Z) (Z) 32	26 30 38 (D) (Z) (Z) 32	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	3 541	2 092	2 130	2 751	1	2	4	5
Proprietors and working partners.....	2 199	605	913	1 894	3	9	7	7
All employees**	22 217	13 847	15 739	19 165	2	2	2	3
Construction workers:								
March.....	14 912	8 605	10 248	13 049	2	3	2	3
May	17 453	10 196	11 955	17 002	2	3	3	3
August	19 305	11 529	12 978	18 419	2	3	2	7
November.....	17 336	10 324	11 681	15 628	2	3	3	3
Average	17 252	10 164	11 949	16 039	2	2	2	3
Other employees:								
March.....	4 993	3 593	3 751	2 969	2	3	3	3
May	4 871	3 664	(NA)	(NA)	2	3	(NA)	(NA)
August	5 055	3 857	(NA)	(NA)	2	3	(NA)	(NA)
November.....	4 946	3 621	(NA)	(NA)	2	3	(NA)	(NA)
Average	4 966	3 684	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	479 350	278 255	313 450	251 616	1	1	1	2
Payroll, construction workers	343 681	183 967	231 962	203 302	2	2	1	2
Payroll, other employees	135 669	94 287	81 487	48 314	2	2	2	2
First quarter payroll, all employees	100 079	58 945	65 171	50 728	2	2	1	1
Fringe benefits, all employees	107 302	72 834	63 678	45 674	2	2	2	2
Legally required expenditures.....	74 893	52 389	49 014	28 118	2	2	2	2
Voluntary expenditures.....	32 408	20 445	14 664	17 556	2	3	4	2
Dollar value of business done	2 358 226	1 996 105	1 286 327	1 112 794	2	1	2	2
Value of construction work	2 261 464	1 723 338	1 232 787	1 061 289	2	1	2	2
Value of construction work subcontracted in from others	587 742	276 677	194 409	209 893	5	7	24	(Z)
Other business receipts	96 762	(S)	50 354	51 504	5	(S)	4	5
Net value of construction†	1 709 621	765 202	927 323	814 188	2	2	2	2
Value added††	1 014 179	585 196	475 451	478 981	2	2	2	2
Selected costs.....	1 344 046	1 407 150	807 689	617 253	2	1	2	3
Materials, components, and supplies	750 317	423 332	474 919	351 354	3	3	2	4
Construction work subcontracted out to others	551 842	958 135	305 463	247 101	3	1	2	3
Selected power, fuels, and lubricants	41 887	25 682	27 306	18 797	2	2	3	2
Electricity.....	5 106	6 071	3 189	1 702	4	4	5	5
Natural gas	1 838	1 114	792	986	4	6	6	7
Gasoline and diesel fuel	32 506	16 819	21 406	14 010	2	3	3	2
On highway use.....	23 835	11 520	(NA)	(NA)	3	3	(NA)	(NA)
Off highway use.....	8 671	5 298	(NA)	(NA)	3	5	(NA)	(NA)
Other, including lubricating oils and greases.....	2 437	1 677	1 918	2 100	7	9	7	7
Rental cost for machinery, equipment, and buildings	33 937	22 198	26 871	21 638	5	5	4	2
For machinery and equipment	25 578	15 499	21 207	19 034	5	6	5	2
For buildings.....	8 359	6 698	5 664	2 604	7	5	5	4
Selected purchased services	54 291	27 186	23 854	22 694	3	4	3	3
Communication services	10 372	8 981	7 104	4 183	5	4	3	7
Repairs to buildings and other structures	3 616	1 283	812	829	17	16	7	9
Repairs to machinery and equipment	40 302	16 920	15 937	17 682	3	5	3	3
Ownership of construction projects:								
Value of construction work	2 261 464	1 723 338	1 232 787	1 061 289	2	1	2	2
Government owned	642 394	786 706	305 087	246 387	5	3	5	1
Federal	232 181	178 278	(NA)	(NA)	9	7	(NA)	(NA)
State and local	410 213	608 427	(NA)	(NA)	7	3	(NA)	(NA)
Privately owned	1 619 069	936 631	927 699	814 902	3	4	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	373 525	194 987	4	8
Capital expenditures, other than land -----	54 465	17 840	6	9
New -----	32 619	12 061	8	12
Used -----	21 846	5 778	8	14
Retirements and disposition of depreciable assets -----	14 353	3 925	7	13
End-of-year gross book value of depreciable assets -----	413 638	208 902	4	8
Depreciation charges during year-----	43 915	21 149	4	5
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	42 776	50 925	15	24
Capital expenditures, other than land -----	3 332	1 439	18	28
New buildings and other structures -----	2 543	510	23	29
Used buildings and other structures -----	789	928	18	39
Retirements and disposition of depreciable assets -----	* 1 679	228	41	21
End-of-year gross book value of depreciable assets -----	44 428	52 137	14	24
Depreciation charges during year-----	3 240	2 119	15	13
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	330 750	144 061	4	5
Capital expenditures, other than land -----	51 133	16 400	6	9
New machinery and equipment, including automobiles and trucks -----	30 076	11 550	9	12
New automobiles and trucks, intended primarily for highway use -----	11 432	6 769	12	15
Used machinery and equipment, including automobiles and trucks -----	21 057	4 849	8	13
Retirements and disposition of depreciable assets -----	12 674	3 697	6	13
End-of-year gross book value of depreciable assets -----	369 209	156 765	4	5
Depreciation charges during year-----	40 675	19 029	4	6

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	3 541	1
Value of construction work	2 261 464	2
Establishments with inventories:		
Number	1 163	4
Value of construction work	838 429	3
Inventories ¹ :		
End of 1992, materials and supplies	33 961	12
End of 1991, materials and supplies	33 246	10
Establishments with no inventories:		
Number	1 160	5
Value of construction work	924 836	3
Establishments not reporting:		
Number	1 218	4
Value of construction work	498 199	4

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments	3 541	(S)	619	324	149	38	11	1	1	—
All employees**	22 217	4 482	4 008	4 244	4 249	2 367	2 867	(D)	(D)	—
Payroll, all employees	479 350	69 185	73 265	88 194	102 388	67 777	78 541	(D)	(D)	—
Dollar value of business done	2 358 226	461 729	354 741	432 127	469 904	292 245	347 480	(D)	(D)	—
Value of construction work	2 261 464	454 069	348 236	421 893	451 359	287 368	298 538	(D)	(D)	—
Net value of construction work†	1 709 621	366 323	271 707	346 261	322 522	204 224	198 585	(D)	(D)	—
Value added††	1 014 179	201 165	150 007	197 631	184 146	120 896	160 335	(D)	(D)	—
Cost of materials, components, supplies, and fuels	792 204	172 817	128 206	158 864	156 920	88 205	87 192	(D)	(D)	—
Cost of construction work subcontracted out to others	551 842	87 746	76 529	75 632	128 837	83 144	99 953	(D)	(D)	—
Rental cost for machinery, equipment, and buildings	33 937	4 387	5 436	4 809	6 309	5 931	7 066	(D)	(D)	—
Capital expenditures, other than land	54 465	9 852	6 692	12 482	8 884	10 050	6 506	(D)	(D)	—
End-of-year gross book value of depreciable assets	413 638	67 331	38 026	76 338	76 576	67 702	87 664	(D)	(D)	—
1987										
All employees**	13 847	(S)	2 544	2 885	2 206	3 432	(D)	—	—	(D)
Value of construction work	1 723 338	(S)	431 771	(D)	1 087 573	(D)	(D)	—	—	(D)
Value added††	585 196	(S)	(D)	208 635	(D)	200 540	(D)	—	—	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees**	2	5	9	8	5	(Z)	(Z)	(D)	(D)	—
Net value of construction work†	2	7	9	7	4	(Z)	(Z)	(D)	(D)	—
Capital expenditures, other than land	6	16	27	18	3	(Z)	(Z)	(D)	(D)	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	3 541	(S)	(S)	(S)	1 028	595	514	278	93	37	26
All employees** -----	22 217	(S)	(S)	(S)	2 758	2 722	3 763	4 032	2 895	1 494	3 403
Payroll, all employees -----	479 350	(S)	(S)	(S)	37 844	47 521	68 073	88 417	78 927	45 441	101 356
Dollar value of business done -----	2 358 226	(S)	(S)	(S)	169 629	205 019	355 768	427 139	316 234	243 562	592 995
Value of construction work -----	2 261 464	(S)	(S)	(S)	167 696	203 112	349 626	410 409	304 425	237 621	540 956
Net value of construction work† -----	1 709 621	(S)	(S)	(S)	148 880	176 764	293 064	325 061	241 094	173 883	306 585
Value added†† -----	1 014 179	(S)	(S)	(S)	86 371	101 714	157 700	191 882	143 508	100 124	207 028
Cost of materials, components, supplies, and fuels -----	792 204	(S)	(S)	(S)	64 442	76 958	141 505	149 909	109 395	79 700	151 596
Cost of construction work subcontracted out to others -----	551 842	(S)	(S)	(S)	(S)	26 347	56 562	85 348	63 331	63 738	234 371
Rental cost for machinery, equipment, and buildings -----	33 937	(S)	(S)	(S)	2 184	2 635	3 741	5 900	5 072	4 253	9 199
Capital expenditures, other than land -----	54 465	(S)	(S)	(S)	4 397	4 790	8 498	10 414	10 216	5 490	9 244
End-of-year gross book value of depreciable assets -----	413 638	(S)	(S)	(S)	28 209	39 485	45 045	64 375	80 175	29 747	117 306
1987											
All employees** -----	13 847	154	(S)	(S)	1 773	1 802	2 068	2 618	1 311	562	2 586
Value of construction work -----	1 723 338	(D)	(S)	(S)	1 687 865	(D)	(D)	(D)	(D)	(D)	(D)
Value added†† -----	585 196	1 088	(S)	(S)	(D)	(D)	197 919	386 189	(D)	(D)	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	(S)	(S)	(S)	8	9	9	7	4	2	(Z)
Net value of construction work† -----	2	(S)	(S)	(S)	7	9	9	8	5	4	(Z)
Capital expenditures, other than land -----	6	(S)	(S)	(S)	21	25	22	20	5	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	2 261 464	1 433 240	461 848	287 671	2	2	4	4
Building construction	1 622 407	1 092 051	325 951	204 405	2	3	5	5
Single-family houses	614 610	483 047	80 270	51 294	5	6	10	9
Single-family houses, detached	582 223	458 097	75 521	48 606	5	6	10	10
Single-family houses, attached, including townhouses and townhouse-type condominiums	32 387	24 950	4 749	(S)	12	13	19	(S)
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	40 136	32 805	3 541	3 789	9	11	25	18
Other residential buildings, including hotels, motels, and tourist cabins	25 658	18 737	3 906	*3 015	26	33	21	45
Hotels, motels, and tourist cabins	11 561	8 690	1 819	1 052	9	10	15	18
Other residential buildings	*14 097	*10 047	2 087	*1 963	46	62	37	69
Office buildings	104 403	48 966	22 650	32 787	6	8	10	9
Other commercial buildings such as stores, restaurants, and automobile service stations	211 900	134 725	58 206	18 969	7	9	7	18
Industrial buildings and warehouses	269 174	138 726	71 731	58 717	6	7	11	9
Industrial buildings	225 369	108 608	60 602	56 159	7	8	13	9
Warehouses	43 805	30 118	11 129	2 558	14	20	8	13
Religious buildings	46 377	19 734	23 031	3 612	24	24	31	30
Educational buildings	112 132	83 840	20 121	8 172	4	4	13	23
Hospitals and institutional buildings	92 419	62 812	24 870	4 737	5	2	14	19
Farm buildings, nonresidential	46 123	35 597	5 870	4 656	15	17	24	24
Amusement, social, and recreational buildings, indoors	12 156	7 392	(D)	(D)	14	14	(D)	(D)
Other nonresidential buildings	47 319	25 671	(D)	(D)	14	19	(D)	(D)
Nonbuilding construction	560 352	341 189	135 897	83 266	3	3	5	8
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	225 595	98 060	81 020	46 516	4	6	4	11
Private driveways and parking areas	13 181	7 522	3 050	(S)	6	4	4	(S)
Bridges, tunnels, and elevated highways	55 495	44 651	(D)	(D)	5	4	(D)	(D)
Conservation and development construction	21 739	16 177	(D)	(D)	22	28	(D)	(D)
Power and communication transmission lines, towers, and related facilities	28 156	16 980	6 888	4 287	16	20	17	35
Sewers, water mains, and related facilities	74 857	59 836	6 464	8 557	13	14	22	25
Sewers, sewer lines, septic systems, and related facilities	34 068	27 760	2 756	3 552	16	19	23	28
Water mains and related facilities	40 789	32 076	3 708	5 005	15	16	26	26
Pipeline construction other than sewer or water lines	(S)	(S)	6 391	1 826	(S)	(S)	12	26
Power plants	13 208	6 849	*3 405	2 953	15	2	53	11
Other nonbuilding construction	101 413	72 620	20 658	8 135	6	4	24	15
Construction work, n.s.k.	78 704	(NA)	(NA)	(NA)	10	(NA)	(NA)	(NA)
1987								
Value of construction work	1 723 338	1 107 234	299 876	257 120	1	2	4	3
Building construction	1 169 978	716 423	218 991	232 406	2	3	5	2
Single-family houses	217 548	140 231	46 109	31 208	7	8	18	11
Single-family houses, detached	198 476	126 630	44 359	27 485	7	9	18	12
Single-family houses, attached, including townhouses and townhouse-type condominiums	19 072	13 601	1 750	3 723	13	17	11	13
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	13 884	7 915	4 422	1 546	15	26	6	16
Other residential buildings, including hotels, motels, and tourist cabins	38 638	31 546	4 126	2 965	30	36	8	19
Hotels, motels, and tourist cabins	30 886	*26 026	3 098	1 761	37	44	6	26
Other residential buildings	7 752	5 520	1 028	1 204	10	12	25	28
Office buildings	68 814	51 067	13 236	4 511	11	14	13	14
Other commercial buildings such as stores, restaurants, and automobile service stations	105 849	69 446	28 537	7 865	7	8	16	7
Industrial buildings and warehouses	589 183	(D)	84 417	(D)	1	(D)	3	(D)
Industrial buildings	554 696	(D)	77 015	(D)	1	(D)	2	(D)
Warehouses	34 487	25 760	7 402	1 324	15	20	13	25
Religious buildings	20 296	11 036	6 526	2 733	16	24	24	23
Educational buildings	55 853	42 683	11 387	1 782	10	10	33	21
Hospitals and institutional buildings	25 675	15 517	8 619	1 538	7	9	11	14
Farm buildings, nonresidential	13 959	11 438	1 125	1 394	9	10	22	20
Amusement, social, and recreational buildings, indoors	2 610	1 109	1 069	432	16	21	8	31
Other nonresidential buildings	17 662	7 421	9 415	825	15	28	15	7
Nonbuilding construction	494 253	388 657	80 882	24 713	2	2	4	15
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	106 754	44 955	56 657	5 142	6	12	4	8
Private driveways and parking areas	7 376	*4 616	1 038	*1 721	34	41	22	56
Bridges, tunnels, and elevated highways	130 584	130 066	*400	117	1	1	62	32
Conservation and development construction	5 771	3 095	460	*2 215	26	26	22	46
Power and communication transmission lines, towers, and related facilities	30 910	27 615	1 977	1 316	6	3	36	20
Sewers, water mains, and related facilities	22 417	15 259	*2 411	*4 745	13	11	49	41
Sewers, sewer lines, septic systems, and related facilities	7 651	4 407	*1 808	*1 435	20	15	63	55
Water mains and related facilities	14 766	10 852	603	*3 310	16	12	33	53
Pipeline construction other than sewer or water lines	*6 123	*5 039	(S)	*435	63	62	(S)	57
Power plants	21 877	19 146	2 394	*338	8	9	12	55
Other nonbuilding construction	162 440	169 101	16 670	9 434	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	59 105	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	3 541	17 252	14 912	17 453	19 305	17 336	1	2	2	2	2	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	774	1 917	1 669	2 021	2 099	1 880	5	8	9	9	8	8
1522	Other residential buildings -----	23	*76	*72	*90	*76	*64	36	40	42	40	40	42
1531	Operative builders -----	123	172	184	162	176	168	19	25	25	26	21	29
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	45	424	417	379	479	421	18	8	7	9	9	9
1542	Nonresidential buildings, n.e.c. -----	172	1 928	1 635	1 899	2 214	1 964	13	8	7	9	8	8
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	76	1 651	1 265	1 834	1 994	1 513	10	4	4	5	5	5
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	4	81	77	84	87	77	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	54	678	501	724	779	706	19	9	9	9	11	11
1629	Heavy construction, n.e.c. -----	141	1 203	1 192	1 312	1 219	1 089	15	9	8	9	9	10
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	396	2 360	2 206	2 239	2 535	2 458	3	5	5	5	5	6
1721	Painting and paper hanging -----	191	466	306	444	591	524	8	12	12	9	16	15
1731	Electrical work -----	273	1 297	1 183	1 229	1 387	1 390	5	6	7	8	8	6
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	106	448	392	512	529	357	9	11	13	12	13	19
1742	Plastering, drywall, and insulation work -----	143	872	767	762	1 023	933	4	8	8	7	9	9
1743	Terrazzo, tile, marble, and mosaic work -----	37	*110	81	*135	*112	*113	22	44	32	49	41	46
175	Carpentry and floor work:												
1751	Carpentry -----	272	724	624	744	815	713	6	10	9	10	12	10
1752	Floor laying and other floor work -----	42	73	69	70	82	70	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1761	Roofing, siding, and sheet metal work -----	165	811	653	835	948	805	12	14	15	15	15	13
1771	Concrete work -----	195	769	598	783	875	820	8	13	15	13	13	15
1781	Water well drilling -----	44	156	141	170	166	147	18	13	15	12	14	14
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	27	158	160	162	155	156	32	31	27	29	34	35
1793	Glass and glazing work -----	20	86	86	77	89	94	14	8	10	7	6	7
1794	Excavation work -----	83	233	195	237	272	228	19	27	28	28	26	29
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	6	70	61	81	65	71	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1799	Special trade contractors, n.e.c. -----	127	(D)	(D)	(D)	(D)	(D)	16	(D)	(D)	(D)	(D)	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees* per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	6.3	21.6	131.1	.212	.350	.244	.260	.015
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.2	15.8	155.8	.132	.382	.315	.035	.006
1522	Other residential buildings -----	5.2	20.0	326.5	.098	.357	.457	(S)	.017
1531	Operative builders -----	2.4	26.1	(S)	(S)	(S)	(S)	(S)	(S)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	13.3	26.3	241.3	.153	.260	.476	.027	.006
1542	Nonresidential buildings, n.e.c. -----	15.5	24.4	229.0	.147	.263	.537	.024	.007
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	26.4	24.4	134.7	.221	.286	.187	.174	.036
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	25.0	28.8	150.4	.236	.404	.134	.013	.007
1623	Water, sewer, and utility lines -----	14.8	26.9	102.6	.307	.266	.100	.112	(S)
1629	Heavy construction, n.e.c. -----	13.7	27.2	150.8	.291	(D)	(D)	.056	.030
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	7.9	22.7	113.3	.266	.455	.064	.676	.009
1721	Painting and paper hanging -----	2.8	14.8	55.6	.304	.297	.026	.629	.013
1731	Electrical work -----	6.0	25.6	103.2	.313	.415	.023	.728	.015
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	(D)	(D)	66.5	.331	.452	.018	.897	.012
1742	Plastering, drywall, and insulation work -----	6.8	16.9	61.9	.302	.361	.110	.848	.016
1743	Terrazzo, tile, marble, and mosaic work -----	3.3	14.8	67.6	.242	.464	.032	(S)	.013
175	Carpentry and floor work:								
1751	Carpentry -----	3.1	14.1	65.2	.252	.331	.139	.516	.006
1752	Floor laying and other floor work -----	2.0	11.0	56.9	.218	(D)	.045	.794	.014
1761	Roofing, siding, and sheet metal work -----	6.0	15.1	84.5	.217	.553	.049	.456	.011
1771	Concrete work -----	4.4	17.1	80.7	.237	(D)	(S)	.417	(S)
1781	Water well drilling -----	4.6	22.4	133.7	.217	.405	.044	.106	*.031
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	7.4	25.1	95.5	.329	.317	.095	.321	.056
1793	Glass and glazing work -----	6.7	17.8	114.7	.238	.560	(S)	.533	.011
1794	Excavation work -----	3.3	16.8	94.2	.208	.162	*.119	.812	.025
1795	Wrecking and demolition work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	19.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c. -----	(D)	(D)	(D)	(D)	.351	.066	(D)	.009

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Not applicable]

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-- Not applicable for this report.

Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Montana. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 9,099 establishments in this State operating in the construction industries. These establishments accounted for \$1.6 billion in total dollar value of business done.

Most of the 9,099 construction establishments were small. Of the total, 6,538 were nonemployers, and over half of the employer establishments had less than 5 employees. The 740 construction establishments with 5 employees or more, while representing only 8 percent of all establishments, accounted for more than 72 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$1.5 billion in total dollar value of business done. Of this amount, \$1.4 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$326 million, leaving net value of construction work of \$1.1 billion. In addition, these establishments paid out \$576 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$609 million. (See Introduction and appendixes for explanation of terms.)

There were 2,561 establishments with total employment averaging 13,369 during the year. Total payroll for 1992 was \$294 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 6,538 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$174 million. Most of these establishments, about 80 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

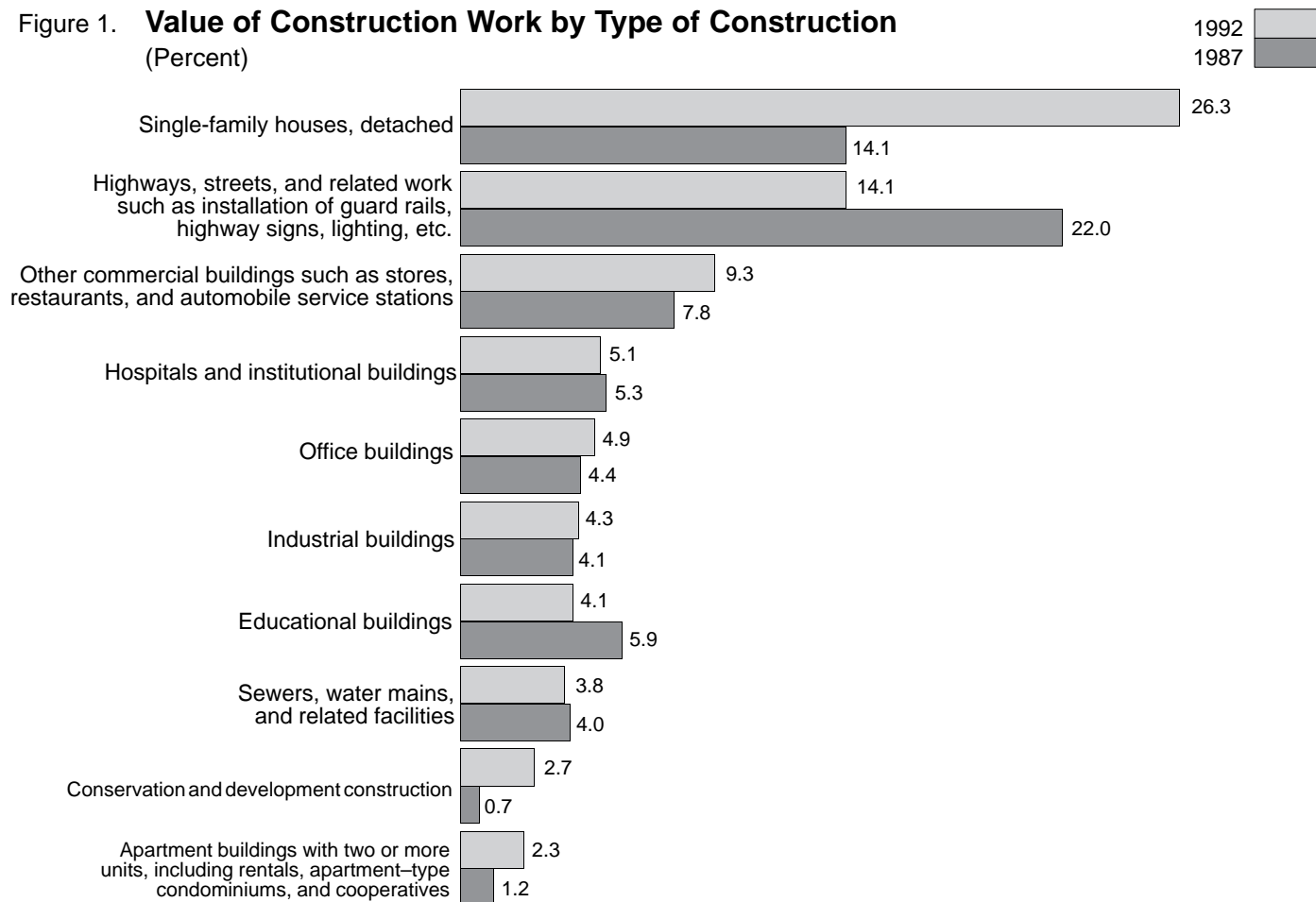


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

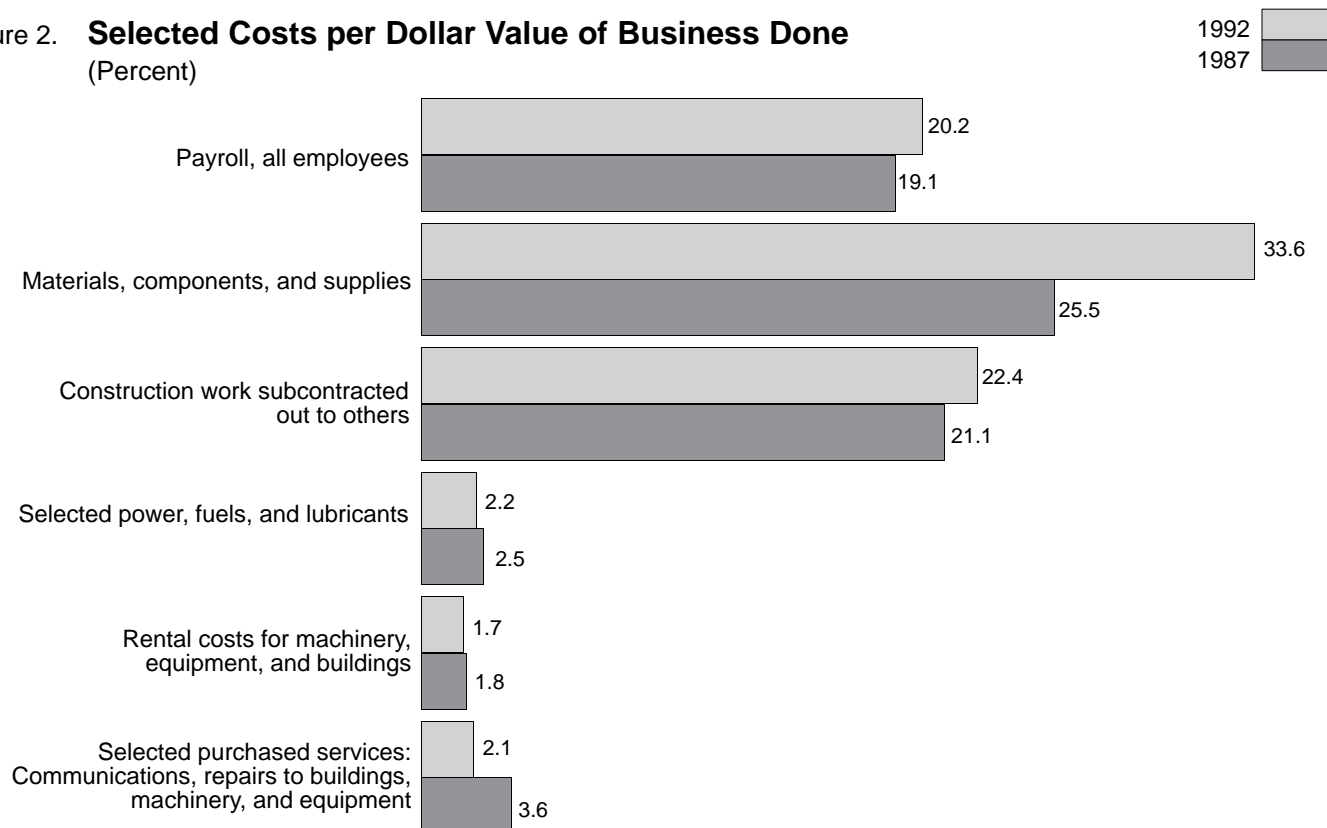


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done	Number	Proprie- tors and working partners	Dollar value of business done¹	Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	9 099	8 362	13 369	1 629 698	6 538	6 605	173 542	2 561	1 757	13 369	1 456 156	2	2
15	Building construction—General contractors and operative builders ----	1 971	1 748	3 746	568 306	1 083	1 119	51 685	888	629	3 746	516 621	4	5
16	Heavy construction other than building construction— contractors-----	471	336	3 286	417 198	225	213	7 703	246	123	3 286	409 495	3	2
17	Special trade contractors -----	6 657	6 278	6 337	644 194	5 230	5 273	114 154	1 427	1 005	6 337	530 040	3	3
1711	Plumbing, heating, and air-conditioning --	527	433	1 344	139 520	250	255	10 093	277	178	1 344	129 427	6	6
1731	Electrical work-----	484	352	1 159	96 307	264	265	8 653	220	87	1 159	87 654	6	7
	1987													
15, 16, 17	Construction industries² -----	8 807	7 478	10 186	1 233 681	6 670	6 685	226 722	2 137	793	10 186	1 006 959	2	2
15	Building construction—General contractors and operative builders ----	2 151	1 755	2 272	364 693	1 568	1 535	63 113	583	220	2 272	301 580	7	7
16	Heavy construction other than building construction— contractors-----	549	306	3 395	429 850	221	210	15 765	328	96	3 395	414 085	3	2
17	Special trade contractors -----	5 887	5 164	4 504	398 986	4 675	4 699	107 813	1 212	465	4 504	291 173	8	5
1711	Plumbing, heating, and air-conditioning --	544	392	1 041	89 932	303	303	13 155	241	89	1 041	76 777	7	5
1731	Electrical work-----	467	345	756	56 214	295	292	10 059	172	53	756	46 155	6	5

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	2 561	13 369	10 600	294 240	218 647	1 415 411	1 089 188	608 848
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	645	1 882	1 530	29 448	23 432	201 058	144 129	57 404
1522	Other residential buildings -----	41	167	138	2 458	1 833	19 207	12 722	7 271
1531	Operative builders -----	61	247	160	8 130	3 444	68 143	42 793	23 185
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	31	242	163	6 602	4 711	34 081	21 019	8 888
1542	Nonresidential buildings, n.e.c. -----	110	1 209	938	26 082	18 450	184 887	89 049	28 426
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	90	1 603	1 359	49 428	38 788	223 102	181 036	124 535
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	5	111	100	(D)	2 314	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	52	613	513	18 480	13 973	52 728	49 438	35 371
1629	Heavy construction, n.e.c. -----	99	960	774	21 789	16 706	108 012	(D)	53 330
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	277	1 344	973	34 090	23 621	126 259	112 947	63 217
1721	Painting and paper hanging -----	114	442	359	7 118	5 639	22 487	21 351	16 175
1731	Electrical work -----	220	1 159	874	28 754	22 516	85 896	82 868	46 127
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	59	312	278	4 784	(D)	17 932	(D)	(D)
1742	Plastering, drywall, and insulation work -----	60	207	177	3 829	2 955	16 859	14 441	7 704
1743	Terrazzo, tile, marble, and mosaic work -----	13	29	24	380	283	2 003	1 978	1 116
175	Carpentry and floor work:								
1751	Carpentry -----	140	380	293	8 197	5 077	54 393	(D)	17 173
1752	Floor laying and other floor work -----	19	44	37	621	560	2 191	2 114	1 293
1761	Roofing, siding, and sheet metal work -----	103	702	560	12 123	8 466	60 193	55 494	24 069
1771	Concrete work -----	164	578	512	8 710	7 568	40 825	38 454	22 067
1781	Water well drilling -----	56	149	120	2 494	1 948	13 681	13 374	7 460
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1793	Glass and glazing work -----	9	88	54	1 830	1 153	9 124	9 069	4 520
1794	Excavation work -----	69	191	142	3 321	2 572	14 218	13 339	9 159
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	10	138	119	2 736	2 454	7 002	6 944	5 595
1799	Special trade contractors, n.e.c. -----	112	(D)	(D)	9 831	5 960	35 508	34 249	24 614

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
521 084	326 224	343 525	24 715	50 815	311 246	10 186	975 525	507 705	2	2	6	15, 16, 17
												15
92 009 5 451	56 929 6 485	(S) 460	1 155 (S)	2 577 *231	12 119 1 091	815 160	63 289 32 855	26 983 *9 678	8 30	10 22	26 74	152 1521 1522
20 138	25 351	136	*105	*33	*1 095	111	27 657	5 340	20	10	51	1531
12 823 63 363	*13 062 95 839	*1 366 *3 941	*223 1 448	*1 367 3 048	*7 540 17 186	*168 1 018	25 765 141 287	6 672 40 056	28 9	36 7	70 12	154 1541 1542
												16
65 957	42 065	46 724	8 874	20 079	116 238	1 616	199 781	135 273	5	4	11	1611
5 571 14 648 (D)	1 015 3 289 (D)	3 021 *2 653 21 299	232 2 519 3 978	418 2 745 5 353	4 126 18 227 41 967	112 662 1 005	7 460 56 186 143 278	4 929 34 282 83 946	(Z) 11 8	(D) 8 (D)	(Z) 22 27	162 1622 1623 1629
												17
52 898	13 312	85 781	1 698	3 144	17 727	1 041	73 898	38 946	6	6	24	1711
6 669	1 136	9 706	245	780	4 405	151	6 462	5 010	12	14	18	1721
38 498	3 028	50 865	851	2 926	12 321	756	44 169	27 956	6	7	36	1731
6 688 8 711 880	(D) *2 418 (S)	16 383 11 370 1 850	105 102 7	(D) 224 20	(S) 1 347 378	191 131 (S)	9 622 5 348 (S)	5 538 3 737 (S)	16 13 (Z)	(D) 11 (Z)	(D) 13 (Z)	174 1741 1742 1743
(D) (S)	(D) 77	11 810 (S)	478 38	614 70	4 875 (S)	455 (S)	37 326 (S)	16 548 (S)	14 (Z)	(D) (Z)	11 (Z)	175 1751 1752
31 573	*4 699	31 808	442	*1 898	7 814	356	27 697	14 986	13	18	40	1761
18 754	2 371	19 451	665	1 581	8 514	188	8 167	4 955	15	12	39	1771
(D)	(S)	1 279	164	391	7 667	155	8 494	6 194	6	7	18	1781
(D) 5 138 4 751 —	(D) 56 879 —	(D) (S) 5 555 —	(D) 136 780 —	(D) 24 2 194 —	(D) 510 12 317 —	(D) 75 (S) (S) (S)	(D) (D) (S) (S)	(D) 2 848 (S) (S)	(D) 17 18 —	(D) 12 14 —	(D) 18 36 —	179 1791 1793 1794 1795
1 349 17 522	58 1 259	*3 281 (D)	72 (D)	(D) 666	*1 032 (D)	84 474	7 699 21 430	5 219 14 598	20 (D)	24 16	(D) 35	1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	2 561	2 137	2 227	2 602	1	2	4	5
Proprietors and working partners.....	1 757	793	924	1 916	3	8	7	7
All employees**	13 369	10 186	12 755	15 691	2	2	2	3
Construction workers:								
March.....	8 613	6 564	8 283	10 636	2	3	3	4
May	10 895	8 092	10 147	14 487	2	3	3	3
August	12 282	9 302	12 287	15 977	2	2	3	3
November.....	10 611	7 939	10 251	13 991	2	3	3	4
Average	10 600	7 974	10 510	13 785	2	2	3	3
Other employees:								
March.....	2 632	2 137	2 205	1 732	3	4	5	6
May	2 722	2 202	(NA)	(NA)	4	4	(NA)	(NA)
August	2 878	2 284	(NA)	(NA)	3	4	(NA)	(NA)
November.....	2 844	2 223	(NA)	(NA)	3	4	(NA)	(NA)
Average	2 769	2 212	(NA)	(NA)	3	4	(NA)	(NA)
Payroll, all employees	294 240	192 743	199 589	175 385	2	2	2	3
Payroll, construction workers	218 647	140 231	160 709	149 055	2	2	2	4
Payroll, other employees	75 593	52 511	38 880	26 330	2	3	3	4
First quarter payroll, all employees	53 594	38 902	39 057	31 203	3	3	2	3
Fringe benefits, all employees	82 489	48 252	34 906	34 444	3	2	3	3
Legally required expenditures.....	56 031	32 820	26 681	20 784	3	2	3	3
Voluntary expenditures.....	26 458	15 432	8 225	13 660	4	3	3	4
Dollar value of business done	1 456 156	1 006 959	890 695	818 535	2	2	2	3
Value of construction work	1 415 411	975 525	864 533	785 195	2	2	2	3
Value of construction work subcontracted in from others	343 525	158 308	174 764	142 373	6	6	5	4
Other business receipts	40 745	26 443	22 503	33 339	7	13	8	27
Net value of construction†	1 089 188	763 533	698 776	637 781	2	2	2	3
Value added††	608 848	507 705	443 360	378 203	2	2	2	4
Selected costs.....	847 308	494 263	443 676	427 828	3	3	3	4
Materials, components, and supplies	488 602	257 050	250 671	262 927	3	3	3	4
Construction work subcontracted out to others	326 224	211 991	165 757	147 414	3	5	3	4
Selected power, fuels, and lubricants	32 482	25 221	27 248	17 487	3	2	4	3
Electricity.....	3 742	2 604	2 356	1 356	7	6	6	9
Natural gas	2 452	698	1 105	886	5	9	7	10
Gasoline and diesel fuel	24 334	19 722	21 421	12 935	3	2	4	3
On highway use.....	15 884	11 387	(NA)	(NA)	4	3	(NA)	(NA)
Off highway use.....	8 450	8 334	(NA)	(NA)	4	4	(NA)	(NA)
Other, including lubricating oils and greases.....	1 954	2 197	2 365	2 314	4	5	8	9
Rental cost for machinery, equipment, and buildings	24 715	18 440	13 008	12 924	5	7	3	5
For machinery and equipment	19 536	13 764	10 006	10 227	5	7	4	4
For buildings.....	5 179	4 676	3 001	2 697	10	9	6	16
Selected purchased services	30 449	36 478	21 712	22 864	5	2	5	2
Communication services	6 482	4 624	3 854	3 098	5	4	5	5
Repairs to buildings and other structures	925	1 092	1 726	1 015	13	12	5	9
Repairs to machinery and equipment	23 042	30 761	16 131	18 752	6	2	5	2
Ownership of construction projects:								
Value of construction work	1 415 411	975 525	864 533	785 195	2	2	2	3
Government owned	466 533	466 814	296 637	262 683	4	3	5	2
Federal	126 894	123 957	(NA)	(NA)	8	8	(NA)	(NA)
State and local	339 638	342 856	(NA)	(NA)	5	3	(NA)	(NA)
Privately owned	948 879	508 710	567 896	522 513	5	6	4	4

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	292 992	229 803	6	4
Capital expenditures, other than land -----	50 815	19 948	6	6
New -----	29 791	11 938	7	8
Used -----	21 024	8 010	8	9
Retirements and disposition of depreciable assets -----	*32 561	11 520	49	30
End-of-year gross book value of depreciable assets -----	311 246	238 232	4	4
Depreciation charges during year -----	35 886	26 598	5	4
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	34 937	30 555	11	10
Capital expenditures, other than land -----	4 827	2 326	23	22
New buildings and other structures -----	4 653	1 218	23	35
Used buildings and other structures -----	175	1 108	26	21
Retirements and disposition of depreciable assets -----	(S)	*1 078	(S)	50
End-of-year gross book value of depreciable assets -----	38 002	31 803	10	10
Depreciation charges during year -----	3 337	3 362	16	12
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	258 055	199 248	7	4
Capital expenditures, other than land -----	45 988	17 622	6	6
New machinery and equipment, including automobiles and trucks -----	25 139	10 720	7	7
New automobiles and trucks, intended primarily for highway use -----	10 925	4 854	12	10
Used machinery and equipment, including automobiles and trucks -----	20 849	6 901	8	9
Retirements and disposition of depreciable assets -----	*30 799	10 441	51	31
End-of-year gross book value of depreciable assets -----	273 244	206 429	4	4
Depreciation charges during year -----	32 549	23 235	5	5

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	2 561	1
Value of construction work	1 415 411	2
Establishments with inventories:		
Number	1 019	4
Value of construction work	687 621	2
Inventories ¹ :		
End of 1992, materials and supplies	21 822	9
End of 1991, materials and supplies	19 446	8
Establishments with no inventories:		
Number	863	5
Value of construction work	505 458	4
Establishments not reporting:		
Number	679	4
Value of construction work	222 333	6

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	2 561	1 821	445	184	87	16	8	—	—	—	
All employees** -----	13 369	3 220	2 842	2 381	2 632	1 096	1 199	—	—	—	
Payroll, all employees -----	294 240	44 025	51 875	54 821	74 015	34 543	34 961	—	—	—	
Dollar value of business done -----	1 456 156	287 857	242 942	223 090	352 061	183 534	166 672	—	—	—	
Value of construction work -----	1 415 411	284 787	236 225	215 161	344 473	175 192	159 574	—	—	—	
Net value of construction work† -----	1 089 188	238 182	200 063	173 959	247 410	113 295	116 279	—	—	—	
Value added†† -----	608 848	125 887	101 370	86 712	141 226	76 425	77 229	—	—	—	
Cost of materials, components, supplies, and fuels -----	521 084	115 366	105 410	95 176	113 773	45 212	46 148	—	—	—	
Cost of construction work subcontracted out to others -----	326 224	46 604	36 162	41 202	97 063	61 897	43 295	—	—	—	
Rental cost for machinery, equipment, and buildings -----	24 715	3 446	3 089	3 985	6 005	2 518	5 672	—	—	—	
Capital expenditures, other than land -----	50 815	9 515	7 542	8 292	12 319	10 464	2 683	—	—	—	
End-of-year gross book value of depreciable assets -----	311 246	53 230	43 582	45 120	93 157	48 738	27 420	—	—	—	
1987											
All employees** -----	10 186	(S)	1 812	1 906	1 724	589	1 344	(D)	—	—	
Value of construction work -----	975 525	(S)	124 736	165 163	205 001	281 834	(D)	(D)	—	—	
Value added†† -----	507 705	(S)	62 161	77 216	89 279	36 084	141 282	(D)	—	—	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	6	10	9	4	(Z)	(Z)	—	—	—	
Net value of construction work† -----	2	7	10	9	4	(Z)	(Z)	—	—	—	
Capital expenditures, other than land -----	6	18	19	23	3	(Z)	(Z)	—	—	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	2 561	(S)	(S)	389	835	427	295	146	51	28	17
All employees** -----	13 369	(S)	(S)	597	1 923	1 930	2 228	2 156	1 386	1 242	1 648
Payroll, all employees -----	294 240	(S)	(S)	5 902	24 674	31 447	45 132	54 580	37 006	36 595	57 004
Dollar value of business done -----	1 456 156	(S)	(S)	29 322	137 381	152 469	202 067	217 332	168 277	189 447	350 932
Value of construction work -----	1 415 411	(S)	(S)	28 778	135 952	149 899	196 600	213 995	157 398	186 267	337 728
Net value of construction work† -----	1 089 188	(S)	(S)	26 534	120 424	130 565	162 249	181 081	122 649	128 732	209 100
Value added†† -----	608 848	(S)	(S)	15 760	65 929	68 185	87 818	94 555	59 648	75 251	137 175
Cost of materials, components, supplies, and fuels -----	521 084	(S)	(S)	11 318	55 924	64 950	79 899	89 864	73 880	56 661	85 129
Cost of construction work subcontracted out to others -----	326 224	(S)	(S)	(S)	(S)	19 334	34 350	32 913	34 749	57 535	128 628
Rental cost for machinery, equipment, and buildings -----	24 715	(S)	(S)	(S)	1 589	2 418	2 824	3 977	3 184	3 073	7 325
Capital expenditures, other than land -----	50 815	(S)	(S)	(S)	5 529	6 158	5 805	8 973	5 346	6 174	11 966
End-of-year gross book value of depreciable assets -----	311 246	(S)	(S)	6 652	24 375	37 209	42 037	51 721	37 833	44 778	65 552
1987											
All employees** -----	10 186	(S)	(S)	818	1 485	1 445	1 286	1 514	1 019	824	1 345
Value of construction work -----	975 525	(S)	(S)	36 923	86 906	98 004	90 053	159 723	110 244	115 228	267 629
Value added†† -----	507 705	(S)	(S)	20 306	52 276	46 200	60 048	71 804	51 238	52 741	146 534
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	(S)	(S)	14	9	11	10	7	6	4	(Z)
Net value of construction work† -----	2	(S)	(S)	11	8	11	11	9	8	6	(Z)
Capital expenditures, other than land -----	6	(S)	(S)	(S)	23	23	23	21	(Z)	2	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

MT-10 MONTANA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 415 411	770 705	411 836	169 274	2	3	3	6
Building construction	896 976	577 166	224 695	95 115	3	4	4	11
Single-family houses	393 780	292 390	66 465	34 925	5	6	8	10
Single-family houses, detached	372 231	276 623	64 175	31 432	5	7	8	10
Single-family houses, attached, including townhouses and townhouse-type condominiums	21 550	15 767	2 290	3 493	13	17	11	28
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	32 397	21 006	7 255	4 137	12	16	13	16
Other residential buildings, including hotels, motels, and tourist cabins.....	19 250	12 683	4 079	2 488	10	10	16	20
Office buildings	68 834	27 912	30 873	10 049	6	9	8	12
Other commercial buildings such as stores, restaurants, and automobile service stations	132 072	77 245	38 377	16 449	7	7	12	18
Industrial buildings and warehouses	74 330	41 799	18 522	14 009	12	19	9	21
Industrial buildings	60 500	34 866	14 444	11 191	14	22	8	23
Warehouses	13 830	6 934	4 078	*2 818	23	30	20	40
Educational buildings	58 153	27 056	25 686	*5 411	8	12	8	44
Hospitals and institutional buildings	71 527	44 766	23 637	3 124	8	12	6	15
Farm buildings, nonresidential	9 509	*6 719	*1 544	1 246	36	44	45	38
Other nonresidential buildings	37 124	25 589	8 257	3 278	8	8	20	31
Nonbuilding construction	454 839	193 540	187 141	74 159	2	4	3	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	200 247	51 518	111 653	37 076	3	9	3	5
Airport runways and related work	11 837	(D)	5 338	(D)	6	(D)	14	(D)
Private driveways and parking areas	10 799	6 855	(D)	(D)	26	23	(D)	(D)
Fencing	10 068	9 296	(S)	*552	39	39	(S)	59
Bridges, tunnels, and elevated highways	26 028	10 745	13 770	1 513	2	4	1	(Z)
Dam and reservoir construction	12 167	(D)	(D)	(D)	10	(D)	(D)	(D)
Conservation and development construction	38 574	27 206	*5 055	6 313	9	9	46	19
Power and communication transmission lines, towers, and related facilities.....	29 233	19 932	5 212	4 089	9	11	29	11
Sewers, water mains, and related facilities.....	53 614	38 401	8 979	6 234	7	9	15	16
Sewers, sewer lines, septic systems, and related facilities	28 287	20 230	4 115	3 943	9	12	6	22
Water mains and related facilities.....	25 327	18 171	4 865	2 291	9	9	27	15
Pipeline construction other than sewer or water lines	15 045	6 829	3 700	4 516	16	31	8	1
Other nonbuilding construction	47 228	18 438	21 165	7 625	6	5	3	27
Construction work, n.s.k.	63 596	(NA)	(NA)	(NA)	9	(NA)	(NA)	(NA)
1987								
Value of construction work	975 525	620 228	230 254	84 208	2	3	4	5
Building construction	512 264	332 371	129 544	50 348	4	5	5	7
Single-family houses	151 745	100 427	32 704	18 613	8	11	15	11
Single-family houses, detached	137 652	88 462	31 631	17 558	9	11	15	11
Single-family houses, attached, including townhouses and townhouse-type condominiums	14 093	11 965	*1 073	1 055	28	32	50	18
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	12 068	9 022	1 043	2 001	10	8	29	19
Other residential buildings, including hotels, motels, and tourist cabins.....	37 040	22 306	12 469	2 284	16	27	6	17
Office buildings	43 378	26 086	12 435	4 856	10	15	14	12
Other commercial buildings such as stores, restaurants, and automobile service stations	76 088	49 717	20 244	6 125	17	25	10	21
Industrial buildings and warehouses	50 490	22 423	20 489	7 577	8	14	5	27
Industrial buildings	40 126	15 475	18 072	6 578	9	16	5	31
Warehouses	10 364	6 948	2 417	*999	13	18	14	40
Educational buildings	57 561	47 510	7 324	2 726	4	3	13	18
Hospitals and institutional buildings	52 037	36 871	13 360	1 805	7	9	12	7
Farm buildings, nonresidential	3 529	2 362	225	941	29	38	34	30
Other nonresidential buildings	28 322	15 641	9 245	3 433	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	422 426	287 856	100 709	33 860	3	2	7	9
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	214 812	139 637	63 959	11 215	3	2	9	15
Private driveways and parking areas	2 153	1 430	*215	*507	33	25	58	74
Fencing	*6 564	*4 923	(S)	*1 319	40	42	(S)	69
Bridges, tunnels, and elevated highways	28 886	(D)	(D)	801	7	(D)	(D)	14
Dam and reservoir construction	22 893	(D)	(D)	1 620	8	(D)	(D)	8
Conservation and development construction	6 922	4 047	2 747	(S)	10	11	12	(S)
Power and communication transmission lines, towers, and related facilities.....	11 006	5 016	2 516	3 473	9	12	11	10
Sewers, water mains, and related facilities.....	39 483	33 029	3 352	*3 100	13	13	18	43
Sewers, sewer lines, septic systems, and related facilities	18 127	14 474	2 255	1 397	7	4	22	35
Water mains and related facilities.....	21 356	18 555	1 097	*1 703	22	23	28	53
Other nonbuilding construction	89 707	99 774	27 920	11 582	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	40 834	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	2 561	10 600	8 613	10 895	12 282	10 611	1	2	2	2	2	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	645	1 530	1 376	1 411	1 777	1 557	5	9	10	9	9	10
1522	Other residential buildings -----	41	138	121	*227	86	115	37	27	23	51	23	35
1531	Operative builders -----	61	160	145	174	174	148	25	25	26	25	25	27
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	31	163	151	166	170	165	23	29	30	29	31	30
1542	Nonresidential buildings, n.e.c. ---	110	938	713	930	1 099	1 011	17	9	9	10	10	7
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	90	1 359	820	1 588	1 816	1 213	14	5	5	4	5	7
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	5	100	82	122	92	102	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	52	513	410	497	563	583	21	12	18	10	10	11
1629	Heavy construction, n.e.c. -----	99	774	(D)	770	931	(D)	16	9	(D)	10	10	(D)
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	277	973	910	993	1 052	936	5	5	5	6	6	7
1721	Painting and paper hanging -----	114	359	241	370	468	357	8	12	14	14	14	14
1731	Electrical work -----	220	874	797	836	924	939	4	6	6	5	8	7
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	59	278	240	259	321	290	10	16	16	13	20	17
1742	Plastering, drywall, and insulation work -----	60	177	194	179	180	158	8	15	14	14	15	16
1743	Terrazzo, tile, marble, and mosaic work -----	13	24	23	30	21	22	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
175	Carpentry and floor work:												
1751	Carpentry -----	140	293	251	303	349	269	9	14	14	14	11	13
1752	Floor laying and other floor work --	19	37	33	35	36	43	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1761	Roofing, siding, and sheet metal work -----	103	560	454	545	642	598	13	12	13	13	12	12
1771	Concrete work -----	164	512	393	522	618	515	10	15	15	16	15	16
1781	Water well drilling -----	56	120	103	121	141	113	3	7	8	7	8	7
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	2	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1793	Glass and glazing work -----	9	54	51	51	56	59	21	16	15	15	17	16
1794	Excavation work -----	69	142	116	133	155	162	14	18	22	18	19	18
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	10	119	101	152	111	113	13	20	23	11	27	24
1799	Special trade contractors, n.e.c. ---	112	(D)	(D)	(D)	(D)	(D)	17	(D)	(D)	(D)	(D)	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees* per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	5.2	22.0	133.5	.208	.368	.230	.243	.017
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	2.9	15.6	131.4	.146	.458	.283	(S)	.006
1522	Other residential buildings -----	4.1	14.7	139.2	.128	.284	.338	.024	(S)
1531	Operative builders -----	4.1	32.9	425.9	.119	.296	.372	.002	.002
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	7.7	27.3	209.1	.194	.376	.383	*.040	*.007
1542	Nonresidential buildings, n.e.c. -----	11.0	21.6	197.1	.141	.343	.518	*.021	.008
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	17.9	30.8	164.2	.222	.296	.189	.209	.040
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	22.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	11.7	30.1	102.8	.350	.278	.062	*.050	.048
1629	Heavy construction, n.e.c. -----	9.7	22.7	139.6	.202	(D)	(D)	.197	.037
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	4.8	25.4	129.8	.270	.419	.105	.679	.013
1721	Painting and paper hanging -----	3.9	16.1	62.6	.317	.297	.051	.432	.011
1731	Electrical work -----	5.3	24.8	98.3	.335	.448	.035	.592	.010
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.3	15.3	64.5	.267	.373	(D)	.914	.006
1742	Plastering, drywall, and insulation work -----	3.5	18.5	95.2	.227	.517	.143	.674	.006
1743	Terrazzo, tile, marble, and mosaic work -----	2.2	13.1	83.5	.190	.439	(S)	.924	.003
175	Carpentry and floor work:								
1751	Carpentry -----	2.7	21.6	185.6	.151	(D)	(D)	.217	.009
1752	Floor laying and other floor work -----	2.3	14.1	59.2	.283	(S)	.035	(S)	.017
1761	Roofing, siding, and sheet metal work -----	6.8	17.3	107.5	.201	.525	*.078	.528	.007
1771	Concrete work -----	3.5	15.1	79.7	.213	.459	.058	.476	.016
1781	Water well drilling -----	2.7	16.7	114.0	.182	(D)	(S)	.094	.012
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1793	Glass and glazing work -----	9.7	20.8	169.0	.201	.563	.006	(S)	.015
1794	Excavation work -----	2.8	17.4	100.1	.234	.334	.062	.391	.055
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	14.5	19.8	58.8	.391	.193	.008	*.469	.010
1799	Special trade contractors, n.e.c. -----	(D)	(D)	(D)	.277	.493	.035	(D)	(D)

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992**

[Not applicable]

Contents

Nevada

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-- Not applicable for this report.

Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Nevada. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 8,463 establishments in this State operating in the construction industries. These establishments accounted for \$5.5 billion in total dollar value of business done.

Most of the 8,463 construction establishments were small. Of the total, 5,152 were nonemployers, and over half of the employer establishments had less than 5 employees. The 1,489 construction establishments with 5 employees or more, while representing only 18 percent of all establishments, accounted for more than 89 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$5.3 billion in total dollar value of business done. Of this amount, \$5.2 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.5 billion, leaving net value of construction work of \$3.7 billion. In addition, these establishments paid out \$1.7 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$2.3 billion. (See Introduction and appendixes for explanation of terms.)

There were 3,311 establishments with total employment averaging 41,031 during the year. Total payroll for 1992 was \$1.2 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 5,152 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$179 million. Most of these establishments, about 80 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

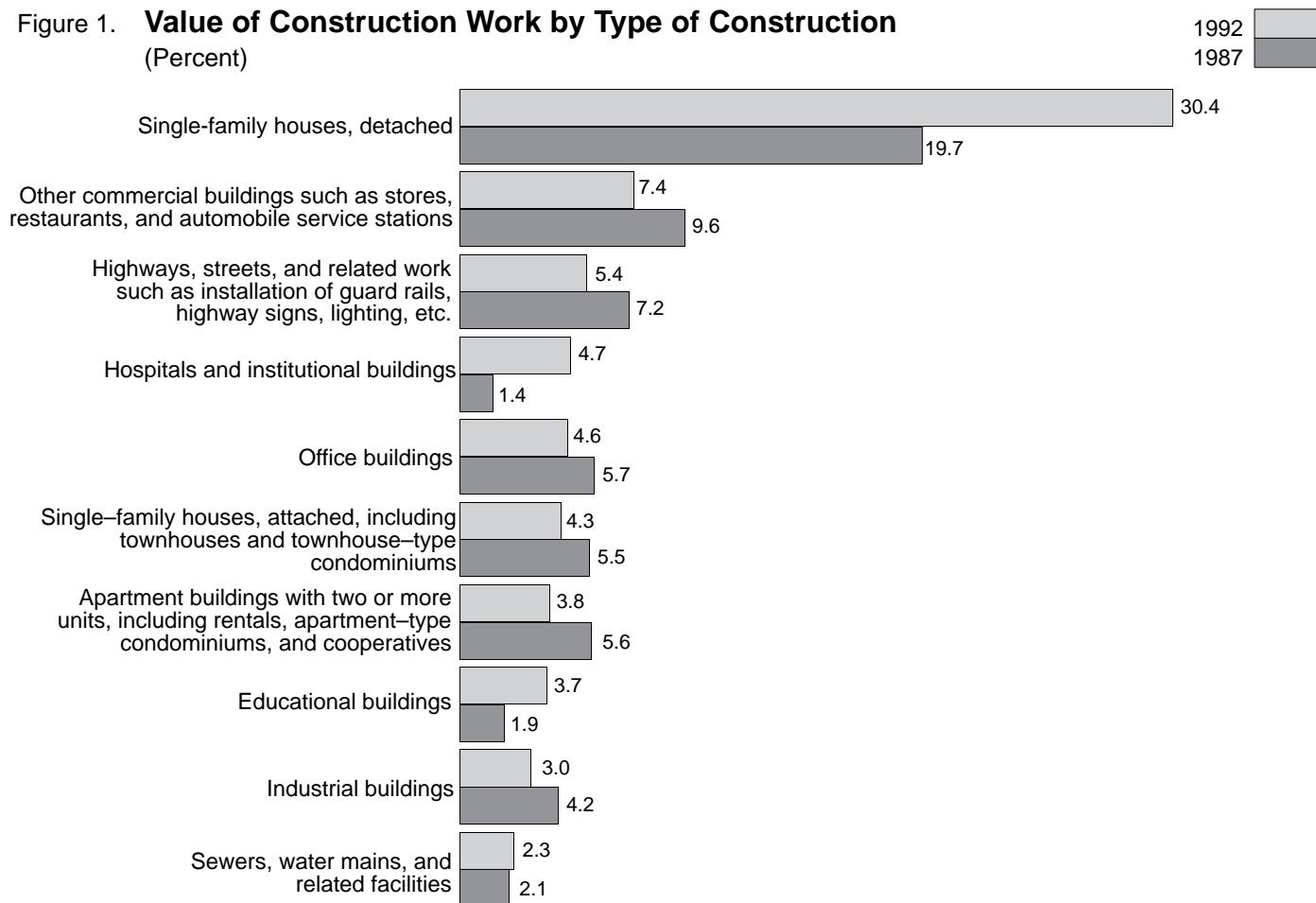


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

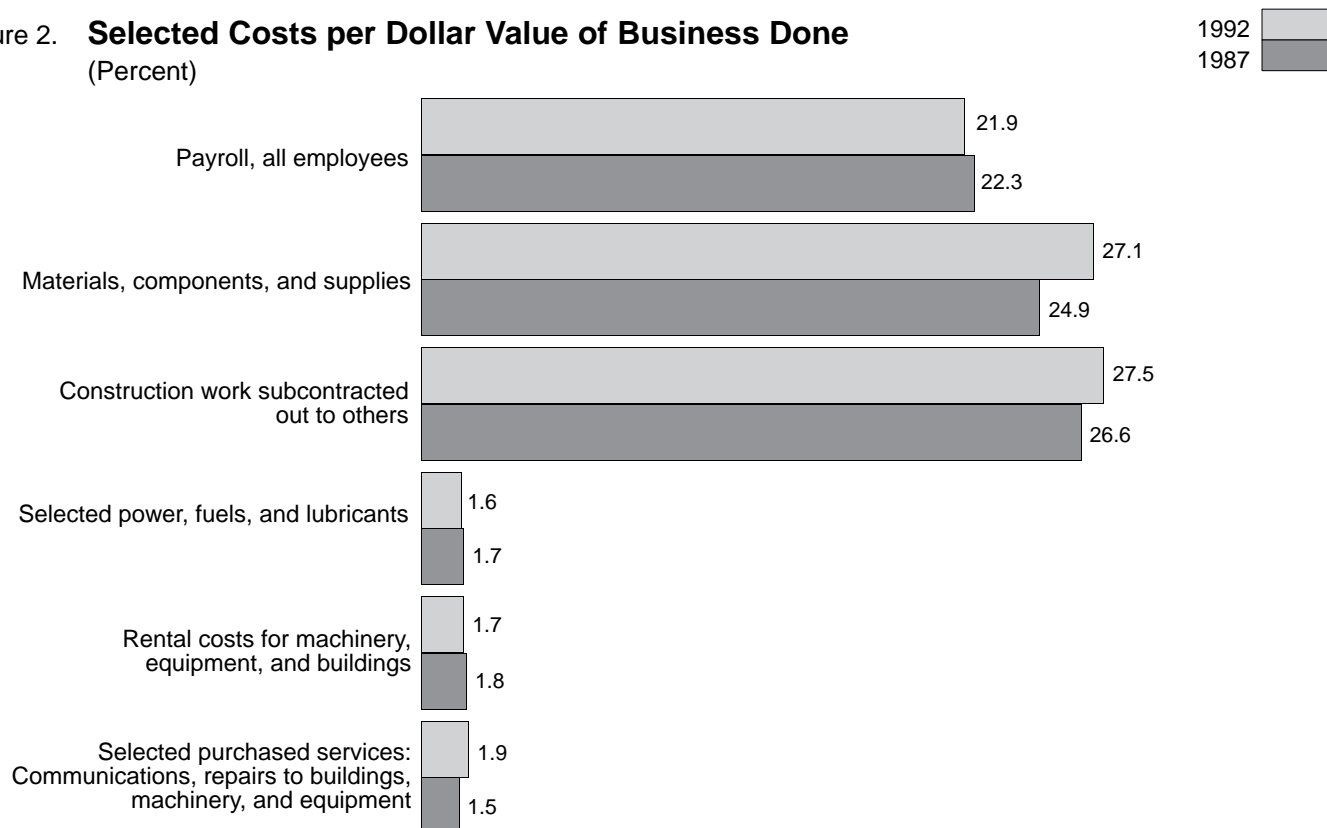


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	8 463	6 650	41 031	5 500 323	5 152	4 978	179 100	3 311	1 672	41 031	5 321 223	1	1
15	Building construction—General contractors and operative builders ----	1 948	1 387	7 884	2 320 820	955	871	79 553	993	516	7 884	2 241 267	2	2
16	Heavy construction other than building construction— contractors-----	308	164	8 805	980 055	99	86	3 076	209	(S)	8 805	976 979	2	1
17	Special trade contractors -----	6 208	5 098	24 341	2 199 448	4 098	4 021	96 471	2 110	1 077	24 341	2 102 977	1	1
1711	Plumbing, heating, and air-conditioning --	698	527	3 990	424 960	328	325	11 042	370	(S)	3 990	413 918	2	2
1731	Electrical work-----	561	331	3 555	322 159	256	238	6 486	305	93	3 555	315 673	3	2
	1987													
15, 16, 17	Construction industries² -----	7 496	5 459	32 961	4 022 055	4 950	4 893	340 007	2 546	566	32 961	3 682 048	1	3
15	Building construction—General contractors and operative builders ----	1 856	1 175	6 471	1 562 814	1 092	1 019	115 221	764	156	6 471	1 447 593	3	7
16	Heavy construction other than building construction— contractors-----	228	113	8 861	898 425	87	88	5 196	141	25	8 861	893 229	1	1
17	Special trade contractors -----	5 135	3 907	17 400	1 432 653	3 549	3 528	141 339	1 586	379	17 400	1 291 314	2	2
1711	Plumbing, heating, and air-conditioning --	612	387	3 068	286 546	314	310	17 569	298	77	3 068	268 977	4	4
1731	Electrical work-----	456	264	2 768	255 101	209	206	8 774	247	58	2 768	246 327	8	6

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	3 311	41 031	31 415	1 165 636	825 639	5 202 052	3 739 037	2 330 203
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	507	2 598	1 964	58 271	38 166	507 787	247 064	182 558
1522	Other residential buildings -----	59	880	702	31 622	24 792	287 459	105 060	52 301
1531	Operative builders -----	184	1 892	853	53 138	18 804	697 365	362 279	194 720
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	18	309	221	8 504	5 704	74 328	35 127	16 600
1542	Nonresidential buildings, n.e.c. -----	226	2 205	1 590	67 601	45 372	598 256	227 143	149 736
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	72	1 641	1 353	55 930	44 651	232 688	202 418	128 257
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	53	1 165	939	39 246	30 428	142 783	128 278	81 442
1629	Heavy construction, n.e.c. -----	83	5 855	3 631	219 570	129 026	574 674	510 299	372 788
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	370	3 990	3 070	118 943	87 577	407 390	384 000	220 473
1721	Painting and paper hanging -----	140	796	641	16 583	13 049	45 449	43 678	29 536
1731	Electrical work -----	305	3 555	2 781	97 153	73 474	313 664	282 064	172 207
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	109	1 465	1 263	27 121	22 753	(D)	(D)	(D)
1742	Plastering, drywall, and insulation work -----	176	3 360	2 965	80 093	68 056	205 508	191 341	123 767
1743	Terrazzo, tile, marble, and mosaic work -----	67	653	542	16 733	12 923	46 808	43 859	23 798
175	Carpentry and floor work:								
1751	Carpentry -----	181	2 461	2 138	57 831	45 714	199 553	194 109	107 477
1752	Floor laying and other floor work -----	54	401	319	8 705	6 245	32 135	30 504	18 510
1761	Roofing, siding, and sheet metal work -----	94	1 172	982	28 748	23 104	116 422	107 817	64 161
1771	Concrete work -----	192	2 641	2 352	75 463	60 073	262 344	230 476	131 108
1781	Water well drilling -----	32	214	181	5 105	4 004	22 249	21 836	13 005
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	28	664	557	23 014	18 495	75 430	70 320	53 022
1793	Glass and glazing work -----	47	410	276	10 158	6 836	38 056	37 864	21 389
1794	Excavation work -----	92	858	713	20 465	15 540	77 963	65 243	46 455
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	17	285	219	9 323	6 752	40 944	40 749	24 465
1799	Special trade contractors, n.e.c. -----	205	(D)	(D)	(D)	(D)	119 134	(D)	59 001

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
1 528 006	1 463 015	1 768 434	90 897	95 424	1 357 406	32 961	3 542 235	1 648 169	1	1	3	15, 16, 17
												15
105 264 53 976	260 723 182 399	13 450 7 336	5 941 1 602	3 714 990	45 958 12 885	1 866 676	242 541 236 989	91 992 32 744	6 7	8 6	18 32	152 1521 1522
184 540	335 086	2 450	2 728	3 590	30 448	1 302	351 401	111 965	4	4	19	1531
18 795 94 256	39 201 371 114	*2 968 25 544	368 6 728	201 3 822	2 113 30 361	540 2 087	115 753 416 718	33 494 104 441	15 6	14 5	25 20	154 1541 1542
												16
89 509	30 270	51 781	8 980	9 371	116 561	1 980	301 240	171 391	5	3	20	1611
(D) 47 693 140 495	— 14 505 64 375	(D) 40 530 (D)	— 4 533 18 477	(D) 5 398 37 582	(D) 49 723 (D)	(D) 666 (D)	9 647 69 641 (D)	5 330 41 770 (D)	(D) 5 2	(D) 4 1	(D) 2 3	162 1622 1623 1629
												17
170 055	23 390	319 695	6 967	3 150	48 033	3 068	266 110	143 796	2	2	15	1711
14 201	1 771	29 408	434	(D)	4 878	703	34 102	22 963	9	11	(D)	1721
111 866	31 600	274 658	5 028	3 834	29 767	2 768	244 191	144 674	3	3	15	1731
36 174 70 240 20 154	(D) 14 167 *2 949	(S) 174 515 40 938	(S) 2 924 552	(D) 1 645 (S)	8 749 14 762 3 229	865 2 656 267	57 428 119 984 17 105	32 621 78 448 10 403	5 3 11	(D) 5 10	(D) 15 (S)	174 1741 1742 1743
87 398 (S)	5 445 (S)	133 521 (S)	3 529 (S)	3 317 *86	37 315 (D)	1 683 224	97 627 14 668	49 597 8 136	5 18	6 16	4 60	175 1751 1752
44 104	8 605	92 804	1 162	448	10 304	1 145	77 180	45 112	6	7	18	1761
99 369	31 868	197 010	9 462	5 450	41 223	1 186	94 123	55 118	4	4	7	1771
(D)	413	2 036	546	834	9 423	71	8 598	5 181	14	17	22	1781
(D) 19 244 19 287 (D) 16 284 (D)	*5 110 192 12 720 (D) 195 (D)	(S) 28 665 63 855 — 11 912 51 628	1 281 906 3 867 (D) 606 (D)	*2 012 *273 5 101 — (S) *2 017	*9 752 2 379 37 231 — (S) (D)	284 366 683 *97 121 1 213	24 831 32 397 85 734 5 780 14 982 75 123	14 693 19 043 51 797 5 691 10 537 43 702	4 8 11 (D) (Z) (D)	5 10 10 (D) (Z) (D)	66 45 33 — (S) 54	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	3 311	2 546	2 283	1 817	1	2	3	5
Proprietors and working partners.....	1 672	566	659	1 074	3	10	8	9
All employees**	41 031	32 961	24 344	21 984	1	1	1	2
Construction workers:								
March.....	29 318	24 222	18 196	16 174	1	2	2	2
May	31 151	25 443	18 356	18 062	1	2	2	2
August	33 081	26 015	18 590	19 165	1	2	2	2
November.....	32 112	24 426	17 213	20 191	1	2	3	2
Average.....	31 415	25 026	18 335	18 413	1	2	2	2
Other employees:								
March.....	9 732	7 943	5 992	3 480	1	1	1	3
May	9 580	7 887	(NA)	(NA)	1	2	(NA)	(NA)
August	9 653	7 988	(NA)	(NA)	1	1	(NA)	(NA)
November.....	9 498	7 918	(NA)	(NA)	1	2	(NA)	(NA)
Average.....	9 616	7 934	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	1 165 636	820 432	557 481	324 001	1	1	1	1
Payroll, construction workers	825 639	585 316	426 768	261 267	1	1	1	1
Payroll, other employees	339 997	235 116	130 713	62 734	1	1	1	1
First quarter payroll, all employees	259 927	192 713	131 519	67 576	1	1	1	1
Fringe benefits, all employees	301 346	203 829	116 590	75 808	1	1	1	1
Legally required expenditures.....	182 874	119 465	75 830	36 597	1	2	1	1
Voluntary expenditures.....	118 472	84 363	40 759	39 211	1	1	1	1
Dollar value of business done	5 321 223	3 682 048	2 152 262	1 290 715	1	3	1	1
Value of construction work	5 202 052	3 542 235	2 072 786	1 230 055	1	3	1	1
Value of construction work subcontracted in from others	1 768 434	856 838	492 363	425 594	2	2	2	2
Other business receipts	119 171	63 500	46 725	60 660	4	6	2	2
Net value of construction†	3 739 037	2 561 597	1 536 303	940 533	1	1	1	1
Value added††	2 330 203	1 648 169	1 007 727	579 176	1	2	1	1
Selected costs	2 991 020	1 957 566	1 111 785	675 173	1	4	1	2
Materials, components, and supplies	1 442 374	915 661	525 739	363 864	1	2	1	1
Construction work subcontracted out to others	1 463 015	980 638	536 483	289 522	2	8	1	2
Selected power, fuels, and lubricants	85 632	61 266	49 561	21 787	1	2	2	1
Electricity.....	23 920	13 994	11 479	4 611	1	1	1	2
Natural gas	4 393	1 764	1 380	1 020	4	5	5	5
Gasoline and diesel fuel	53 509	41 580	34 417	13 489	2	2	2	2
On highway use.....	38 219	26 811	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use.....	15 290	14 769	(NA)	(NA)	2	1	(NA)	(NA)
Other, including lubricating oils and greases.....	3 811	3 926	2 284	2 667	8	8	6	3
Rental cost for machinery, equipment, and buildings	90 897	67 085	39 330	19 351	3	2	2	4
For machinery and equipment	62 458	48 864	29 705	16 455	3	3	2	5
For buildings.....	28 440	18 220	9 625	2 896	5	4	3	3
Selected purchased services	98 750	54 782	37 066	21 848	4	2	2	2
Communication services	27 769	13 441	9 387	5 748	5	3	3	2
Repairs to buildings and other structures	4 064	3 523	1 242	827	9	11	6	6
Repairs to machinery and equipment	66 916	37 817	26 437	15 272	4	2	2	2
Ownership of construction projects:								
Value of construction work	5 202 052	3 542 235	2 072 786	1 230 055	1	3	1	1
Government owned	1 328 620	983 801	663 596	286 344	4	3	2	1
Federal	498 074	550 082	(NA)	(NA)	3	1	(NA)	(NA)
State and local	830 546	433 718	(NA)	(NA)	6	7	(NA)	(NA)
Privately owned	3 873 432	2 558 434	1 409 190	943 711	2	5	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 317 363	334 107	1	8
Capital expenditures, other than land -----	95 424	52 530	3	4
New -----	77 438	35 231	3	5
Used -----	17 986	17 298	11	7
Retirements and disposition of depreciable assets -----	55 381	19 658	3	26
End-of-year gross book value of depreciable assets -----	1 357 406	366 979	1	6
Depreciation charges during year -----	103 948	40 273	3	5
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	186 572	98 115	7	25
Capital expenditures, other than land -----	8 679	9 625	15	10
New buildings and other structures -----	7 802	7 005	16	5
Used buildings and other structures -----	877	2 619	38	33
Retirements and disposition of depreciable assets -----	3 700	*9 743	3	50
End-of-year gross book value of depreciable assets -----	191 550	97 997	7	21
Depreciation charges during year -----	9 943	6 212	7	22
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 130 791	235 991	1	3
Capital expenditures, other than land -----	86 746	42 905	3	5
New machinery and equipment, including automobiles and trucks -----	69 636	28 226	3	7
New automobiles and trucks, intended primarily for highway use -----	14 863	12 526	7	8
Used machinery and equipment, including automobiles and trucks -----	17 109	14 679	11	6
Retirements and disposition of depreciable assets -----	51 681	9 915	3	12
End-of-year gross book value of depreciable assets -----	1 165 856	268 981	1	3
Depreciation charges during year -----	94 005	34 061	3	4

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	3 311	1
Value of construction work	5 202 052	1
Establishments with inventories:		
Number	1 257	4
Value of construction work	2 317 997	1
Inventories ¹ :		
End of 1992, materials and supplies	51 510	5
End of 1991, materials and supplies	68 392	3
Establishments with no inventories:		
Number	958	4
Value of construction work	2 029 758	2
Establishments not reporting:		
Number	1 097	4
Value of construction work	854 297	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	3 311	(S)	641	423	291	87	38	8	—	1	
All employees** -----	41 031	3 675	4 202	5 704	8 724	6 142	5 732	6 853	—	(D)	
Payroll, all employees -----	1 165 636	64 817	101 065	144 249	249 359	180 333	180 633	245 179	—	(D)	
Dollar value of business done -----	5 321 223	438 295	522 704	649 340	1 164 330	957 036	847 316	742 203	—	(D)	
Value of construction work -----	5 202 052	429 194	516 158	633 057	1 140 765	941 624	801 955	739 299	—	(D)	
Net value of construction work† -----	3 739 037	323 713	366 090	500 351	840 687	635 802	518 070	554 325	—	(D)	
Value added†† -----	2 330 203	193 622	213 751	308 784	517 661	384 186	346 121	366 078	—	(D)	
Cost of materials, components, supplies, and fuels -----	1 528 006	139 192	158 884	207 850	346 590	267 028	217 310	191 151	—	(D)	
Cost of construction work subcontracted out to others -----	1 463 015	105 481	150 068	132 706	300 079	305 822	283 885	184 974	—	(D)	
Rental cost for machinery, equipment, and buildings -----	90 897	(S)	10 439	12 871	22 296	10 717	13 043	15 569	—	(D)	
Capital expenditures, other than land -----	95 424	(S)	8 479	8 936	13 267	9 136	13 806	35 177	—	(D)	
End-of-year gross book value of depreciable assets -----	1 357 406	49 607	79 169	72 597	127 107	94 145	934 781	(D)	—	(D)	
1987											
All employees** -----	32 961	(S)	(S)	4 583	7 436	4 647	9 834	(D)	—	(D)	
Value of construction work -----	3 542 235	(S)	(S)	467 063	742 694	608 576	1 014 295	(D)	—	(D)	
Value added†† -----	1 648 169	(S)	(S)	214 113	333 387	290 143	501 081	(D)	—	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	7	8	6	3	(Z)	(Z)	(Z)	—	(D)	
Net value of construction work† -----	1	7	8	5	1	(Z)	(Z)	(Z)	—	(D)	
Capital expenditures, other than land -----	3	(S)	24	21	3	(Z)	(Z)	(Z)	—	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments	3 311	(S)	(S)	(S)	758	591	570	437	164	107	82
All employees**	41 031	(S)	(S)	(S)	1 868	2 863	4 317	7 358	5 287	5 253	13 356
Payroll, all employees	1 165 636	(S)	(S)	(S)	27 521	55 348	97 917	180 296	147 415	159 701	489 007
Dollar value of business done	5 321 223	(S)	(S)	(S)	124 046	214 934	394 811	680 648	563 331	747 560	2 565 684
Value of construction work	5 202 052	(S)	(S)	(S)	121 426	211 246	389 886	668 293	548 360	736 995	2 495 821
Net value of construction work†	3 739 037	(S)	(S)	(S)	109 565	185 541	330 801	555 803	457 762	515 210	1 557 665
Value added††	2 330 203	(S)	(S)	(S)	(S)	113 060	192 780	346 029	278 176	290 900	1 028 130
Cost of materials, components, supplies, and fuels	1 528 006	(S)	(S)	(S)	48 139	76 169	142 946	222 129	194 557	234 876	599 398
Cost of construction work subcontracted out to others	1 463 015	(S)	(S)	(S)	(S)	25 706	59 085	112 490	90 598	221 785	938 156
Rental cost for machinery, equipment, and buildings	90 897	(S)	(S)	(S)	2 132	(S)	11 495	13 696	10 689	9 173	39 607
Capital expenditures, other than land	95 424	(S)	(S)	(S)	2 742	(S)	6 719	10 834	8 347	8 892	53 785
End-of-year gross book value of depreciable assets	1 357 406	(S)	(S)	(S)	26 896	35 012	62 538	86 879	76 248	80 405	985 597
1987											
All employees**	32 961	(S)	(S)	(S)	(S)	(S)	3 820	6 649	3 487	3 732	10 091
Value of construction work	3 542 235	(S)	(S)	(S)	(S)	(S)	254 331	507 757	412 604	478 600	1 582 210
Value added††	1 648 169	(S)	(S)	(S)	(S)	(S)	129 153	279 581	184 190	218 021	658 082
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	1	(S)	(S)	(S)	10	9	7	4	2	1	(Z)
Net value of construction work†	1	(S)	(S)	(S)	9	9	8	5	3	4	(Z)
Capital expenditures, other than land	3	(S)	(S)	(S)	23	(S)	24	20	5	7	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	5 202 052	3 947 572	727 955	399 152	1	1	3	3
Building construction	3 886 687	3 143 808	520 637	222 243	1	2	4	4
Single-family houses	1 803 825	1 604 139	115 568	84 118	2	3	9	6
Single-family houses, detached	1 581 328	1 413 088	98 473	69 767	2	2	10	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	222 497	191 051	17 095	14 351	14	16	17	16
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	198 639	170 705	10 333	17 601	12	14	15	10
Other residential buildings, including hotels, motels, and tourist cabins	466 999	333 959	115 806	17 233	1	1	4	12
Office buildings	241 827	157 700	61 565	22 561	4	3	12	11
Other commercial buildings such as stores, restaurants, and automobile service stations	386 455	256 372	80 293	49 790	5	6	9	9
Industrial buildings and warehouses	243 122	190 460	35 155	17 507	3	3	11	9
Industrial buildings	155 230	113 331	27 797	14 101	4	4	14	11
Warehouses	87 892	77 129	7 358	3 406	3	3	12	9
Educational buildings	192 745	162 298	26 098	4 349	7	8	15	10
Hospitals and institutional buildings	244 415	199 998	40 179	4 238	2	1	7	6
Amusement, social, and recreational buildings, indoors	66 851	43 399	21 897	1 555	6	3	15	4
Other nonresidential buildings	41 811	24 778	13 743	3 290	9	7	25	12
Nonbuilding construction	1 187 993	803 765	207 319	176 910	2	2	1	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	279 541	172 945	64 142	42 453	3	4	3	9
Outdoor swimming pools	58 135	51 626	(D)	(D)	23	25	(D)	(D)
Fencing	29 706	25 872	1 303	2 531	17	18	4	19
Bridges, tunnels, and elevated highways	53 702	(D)	(D)	(D)	(Z)	(D)	(D)	(D)
Conservation and development construction	95 789	60 527	32 179	*3 083	3	3	(Z)	48
Power and communication transmission lines, towers, and related facilities	48 001	(D)	(D)	(D)	2	(D)	(D)	(D)
Sewers, water mains, and related facilities	117 443	93 071	11 621	12 750	5	6	3	14
Sewers, sewer lines, septic systems, and related facilities	48 979	37 340	5 379	6 260	7	6	6	29
Water mains and related facilities	68 464	55 732	6 242	6 490	7	8	1	2
Blast furnaces, petroleum refineries, chemical complexes, etc.	26 100	17 859	3 271	4 969	17	11	37	24
Other nonbuilding construction	479 575	313 470	(D)	(D)	1	1	(D)	(D)
Construction work, n.s.k.	127 372	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
1987								
Value of construction work	3 542 235	2 574 333	586 002	252 296	3	4	5	3
Building construction	2 384 003	1 829 795	384 050	150 861	4	5	8	4
Single-family houses	893 397	758 895	87 609	46 891	4	5	9	8
Single-family houses, detached	698 922	580 165	81 259	37 498	4	5	10	10
Single-family houses, attached, including townhouses and townhouse-type condominiums	194 475	178 730	6 350	9 393	11	12	11	15
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	197 057	175 055	10 776	11 225	30	33	9	14
Other residential buildings, including hotels, motels, and tourist cabins	281 604	204 941	59 486	17 176	2	2	5	6
Office buildings	203 341	155 382	34 325	13 633	4	5	6	9
Other commercial buildings such as stores, restaurants, and automobile service stations	339 083	225 387	89 651	24 043	14	17	29	10
Industrial buildings and warehouses	258 876	200 120	40 979	17 776	4	4	5	7
Industrial buildings	148 699	107 657	27 682	13 359	5	6	6	7
Warehouses	110 177	92 463	13 297	4 417	5	6	7	12
Educational buildings	67 633	40 301	21 879	5 452	5	7	7	13
Hospitals and institutional buildings	49 697	25 016	21 943	2 737	11	6	22	12
Amusement, social, and recreational buildings, indoors	39 406	35 744	1 123	2 539	2	1	13	15
Other nonresidential buildings	53 903	27 923	16 273	9 704	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	1 028 628	725 563	201 952	101 112	2	2	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	255 444	137 503	98 364	19 576	1	1	(Z)	3
Outdoor swimming pools	17 165	16 725	*260	179	17	17	50	8
Fencing	9 876	7 747	903	1 226	9	10	21	2
Conservation and development construction	4 715	1 441	2 544	729	21	39	28	19
Power and communication transmission lines, towers, and related facilities	79 962	66 353	5 360	8 249	17	15	37	18
Sewers, water mains, and related facilities	74 398	58 735	12 990	2 672	5	6	5	18
Sewers, sewer lines, septic systems, and related facilities	34 035	26 237	6 511	1 286	5	6	6	23
Water mains and related facilities	40 363	32 498	6 479	1 386	8	9	5	18
Other nonbuilding construction	587 068	437 059	83 901	68 923	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	129 604	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	3 311	31 415	29 318	31 151	33 081	32 112	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	507	1 964	1 910	1 922	2 033	1 993	7	7	7	6	8	7
1522	Other residential buildings -----	59	702	591	658	791	769	23	7	8	9	6	5
1531	Operative builders -----	184	853	889	935	846	743	13	6	5	5	6	8
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	18	221	250	203	231	200	22	16	18	17	15	16
1542	Nonresidential buildings, n.e.c. ---	226	1 590	1 505	1 482	1 638	1 735	12	6	8	7	6	7
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	72	1 353	998	1 457	1 533	1 425	20	5	5	7	5	4
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	1	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	53	939	895	959	1 006	895	18	4	4	4	5	3
1629	Heavy construction, n.e.c. -----	83	3 631	3 613	3 658	3 818	3 436	15	3	2	3	3	4
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	370	3 070	2 736	2 930	3 202	3 413	4	2	3	2	2	3
1721	Painting and paper hanging -----	140	641	573	643	825	525	11	9	10	9	14	9
1731	Electrical work -----	305	2 781	2 510	2 511	2 911	3 191	3	3	3	3	3	3
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	109	1 263	1 258	1 369	1 256	1 168	12	5	5	4	6	5
1742	Plastering, drywall, and insulation work -----	176	2 965	2 884	2 774	3 007	3 194	7	4	5	4	4	3
1743	Terrazzo, tile, marble, and mosaic work -----	67	542	512	514	591	553	4	12	12	12	13	14
175	Carpentry and floor work:												
1751	Carpentry -----	181	2 138	2 037	2 365	2 019	2 129	11	5	5	5	5	5
1752	Floor laying and other floor work --	54	319	315	335	338	288	12	21	20	22	23	19
1761	Roofing, siding, and sheet metal work -----	94	982	932	963	1 033	1 002	6	7	7	6	7	7
1771	Concrete work -----	192	2 352	2 224	2 360	2 512	2 310	7	5	5	5	5	5
1781	Water well drilling -----	32	181	195	198	188	142	27	15	14	14	14	19
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	28	557	413	514	676	628	18	3	5	3	2	3
1793	Glass and glazing work -----	47	276	209	288	297	311	5	9	7	8	9	9
1794	Excavation work -----	92	713	628	694	805	723	12	12	12	11	13	15
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	17	219	174	181	253	267	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1799	Special trade contractors, n.e.c. ---	205	(D)	(D)	(D)	(D)	(D)	11	(D)	(D)	(D)	(D)	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	12.4	28.4	165.6	.224	.294	.281	.340	.017
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	5.1	22.4	258.5	.115	.207	.513	.026	.012
1522	Other residential buildings -----	15.0	35.9	409.5	.110	.188	.635	.026	.006
1531	Operative builders -----	10.3	28.1	817.5	.076	.265	.481	.004	.004
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	17.0	27.5	336.3	.114	.253	.527	*.040	.005
1542	Nonresidential buildings, n.e.c. -----	9.8	30.7	376.3	.113	.158	.620	.043	.011
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	22.7	34.1	172.0	.240	.385	.130	.223	.039
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	22.1	33.7	152.1	.275	.334	.102	.284	.032
1629	Heavy construction, n.e.c. -----	71.0	37.5	158.3	.382	.244	.112	(D)	.032
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	10.8	29.8	132.7	.292	.417	.057	.785	.017
1721	Painting and paper hanging -----	5.7	20.8	70.9	.365	.312	.039	.647	.010
1731	Electrical work -----	11.6	27.3	112.8	.310	.357	.101	.876	.016
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	13.5	18.5	(D)	(D)	(D)	(D)	(D)	(D)
1742	Plastering, drywall, and insulation work -----	19.1	23.8	69.3	.390	.342	.069	.849	.014
1743	Terrazzo, tile, marble, and mosaic work -----	9.8	25.6	86.4	.357	.431	*.063	.875	.012
175	Carpentry and floor work:								
1751	Carpentry -----	13.6	23.5	93.3	.290	.438	.027	.669	.018
1752	Floor laying and other floor work -----	7.5	21.7	100.7	.271	(S)	(S)	(S)	(S)
1761	Roofing, siding, and sheet metal work -----	12.5	24.5	118.6	.247	.379	.074	.797	.010
1771	Concrete work -----	13.7	28.6	111.5	.288	.379	.121	.751	.036
1781	Water well drilling -----	6.7	23.9	122.9	.229	(D)	.019	.092	.025
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	24.1	34.7	135.4	.305	(D)	.068	(S)	.017
1793	Glass and glazing work -----	8.7	24.8	137.9	.267	.506	.005	.753	.024
1794	Excavation work -----	9.3	23.9	109.3	.262	.247	.163	.819	.050
1795	Wrecking and demolition work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	16.8	32.7	187.0	.228	.398	.005	.291	.015
1799	Special trade contractors, n.e.c. -----	(D)	(D)	(D)	(D)	(D)	(D)	.433	(D)

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992**

[Not applicable]

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-- Not applicable for this report.

Summary of Findings

This report provides results from the 1992 Census of Construction Industries for New Mexico. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 10,468 establishments in this State operating in the construction industries. These establishments accounted for \$3.0 billion in total dollar value of business done.

Most of the 10,468 construction establishments were small. Of the total, 6,467 were nonemployers, and over half of the employer establishments had less than 5 employees. The 1,432 construction establishments with 5 employees or more, while representing only 14 percent of all establishments, accounted for more than 80 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$2.83 billion in total dollar value of business done. Of this amount, \$2.79 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$639 million, leaving net value of construction work of \$2.2 billion. In addition, these establishments paid out \$981 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$1.3 billion. (See Introduction and appendixes for explanation of terms.)

There were 4,001 establishments with total employment averaging 30,888 during the year. Total payroll for 1992 was \$610 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 6,467 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$184 million. Most of these establishments, about 78 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

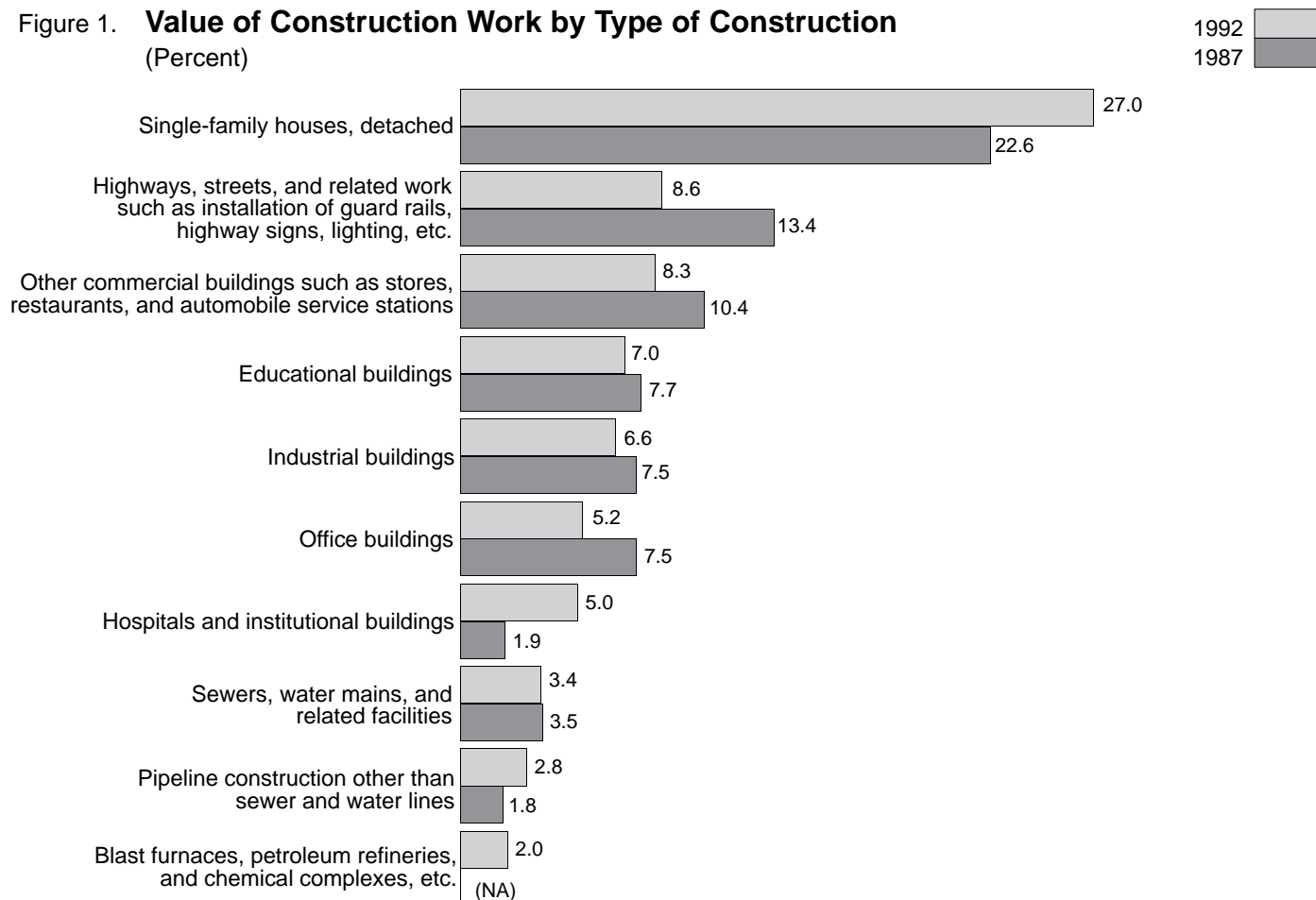


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

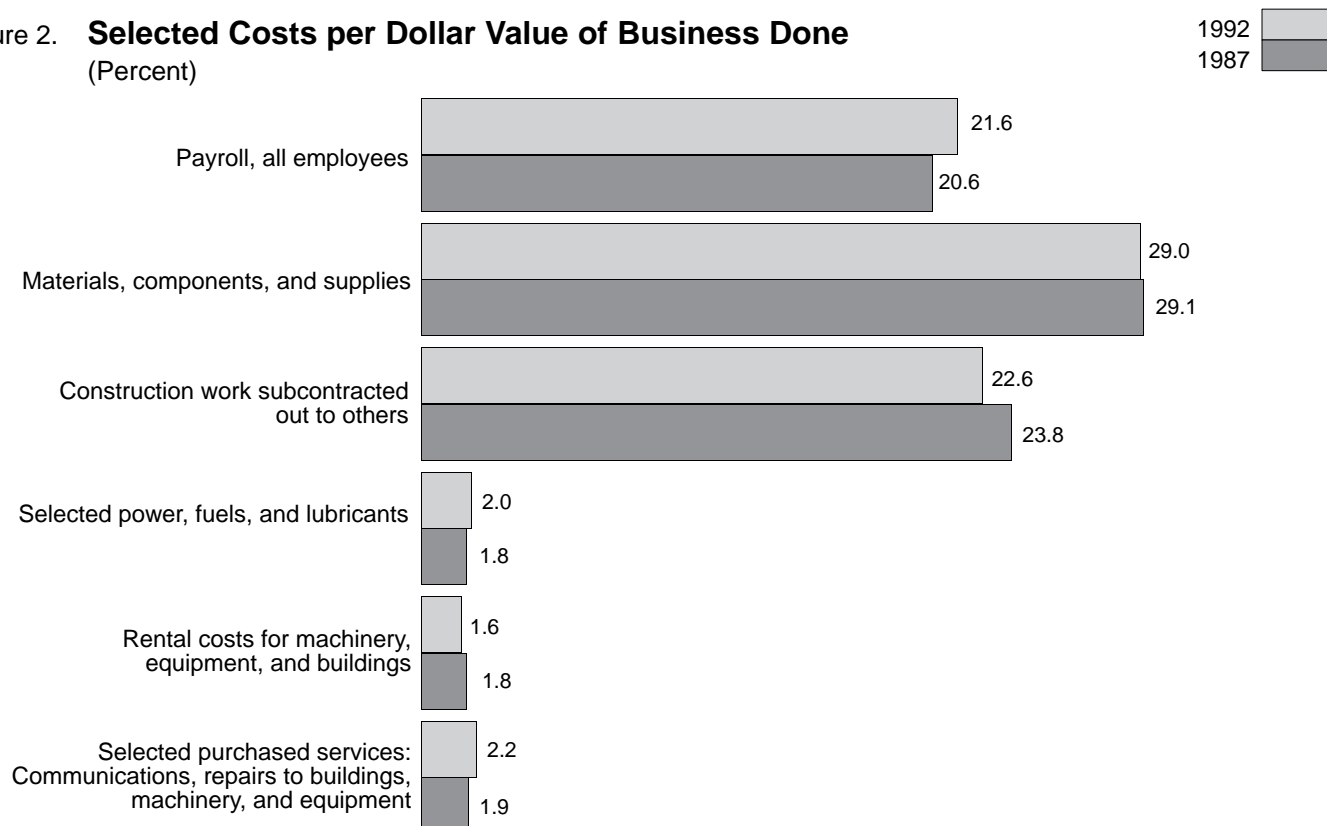


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	10 468	8 628	30 888	3 009 254	6 467	6 323	184 185	4 001	2 305	30 888	2 825 069	1	2
15	Building construction—General contractors and operative builders ----	2 703	2 014	8 520	1 335 135	1 232	1 145	81 215	1 471	869	8 520	1 253 920	3	3
16	Heavy construction other than building construction— contractors-----	425	265	6 291	524 370	176	169	3 783	249	96	6 291	520 587	3	3
17	Special trade contractors -----	7 340	6 349	16 076	1 149 748	5 059	5 009	99 187	2 281	1 340	16 076	1 050 561	2	2
1711	Plumbing, heating, and air-conditioning --	1 037	807	3 309	264 517	539	528	15 793	498	279	3 309	248 724	5	5
1731	Electrical work-----	997	724	3 996	318 880	479	476	11 099	518	248	3 996	307 781	3	3
	1987													
15, 16, 17	Construction industries² -----	10 789	8 165	29 139	2 787 666	7 082	7 042	362 027	3 707	1 123	29 139	2 425 639	2	2
15	Building construction—General contractors and operative builders ----	3 023	1 956	7 787	1 114 703	1 761	1 646	144 865	1 262	310	7 787	969 838	4	4
16	Heavy construction other than building construction— contractors-----	381	188	6 407	587 987	130	128	11 597	251	60	6 407	576 390	2	2
17	Special trade contractors -----	6 988	5 627	14 803	1 005 223	4 859	4 889	134 302	2 129	738	14 803	870 921	2	2
1711	Plumbing, heating, and air-conditioning --	1 046	739	3 276	233 205	535	542	21 034	511	197	3 276	212 171	4	4
1731	Electrical work-----	890	572	2 805	226 289	478	477	16 936	412	95	2 805	209 353	4	3

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	4 001	30 888	24 969	609 996	442 039	2 789 755	2 150 479	1 312 024
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	1 015	3 507	2 742	50 318	36 002	328 529	239 275	129 194
1522	Other residential buildings -----	28	* 134	93	1 734	1 332	11 012	7 687	3 137
1531	Operative builders -----	125	666	386	16 612	6 609	230 697	140 508	97 650
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	70	493	386	9 622	6 869	32 408	20 974	11 239
1542	Nonresidential buildings, n.e.c. -----	233	3 721	2 819	99 838	64 210	633 549	338 185	200 940
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction -----	51	2 160	1 885	48 647	33 943	214 925	178 548	101 537
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	(S)	127	118	(D)	2 195	18 551	(D)	(D)
1623	Water, sewer, and utility lines -----	80	2 813	2 469	64 518	50 683	198 271	175 257	128 495
1629	Heavy construction, n.e.c. -----	112	1 191	1 001	23 128	17 331	84 336	74 503	52 120
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	498	3 309	2 538	65 217	46 890	243 865	217 524	127 581
1721	Painting and paper hanging -----	158	583	511	8 313	6 846	24 508	23 849	16 788
1731	Electrical work -----	518	3 996	3 128	89 972	66 719	305 644	281 972	171 784
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	108	761	692	9 976	(D)	(D)	32 959	20 541
1742	Plastering, drywall, and insulation work -----	169	1 566	1 347	24 788	20 397	68 582	65 307	41 432
1743	Terrazzo, tile, marble, and mosaic work -----	33	100	(S)	1 460	1 155	6 208	6 070	3 255
175	Carpentry and floor work:								
1751	Carpentry -----	139	752	632	11 253	9 218	46 895	39 431	23 060
1752	Floor laying and other floor work -----	56	155	125	2 478	1 961	13 717	12 912	6 448
1761	Roofing, siding, and sheet metal work -----	141	1 160	969	17 616	13 465	66 336	64 137	37 631
1771	Concrete work -----	139	998	835	16 505	12 850	62 044	57 881	32 309
1781	Water well drilling -----	55	165	138	3 237	2 614	13 417	13 285	7 300
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	23	396	347	7 070	5 607	20 933	20 457	10 795
1793	Glass and glazing work -----	31	101	79	2 152	1 468	8 938	(D)	4 491
1794	Excavation work -----	60	495	420	7 799	6 585	29 938	28 378	19 670
1795	Wrecking and demolition work -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	16	314	263	5 191	3 991	14 103	(D)	9 172
1799	Special trade contractors, n.e.c. -----	136	(D)	(D)	18 779	13 234	74 767	71 457	45 519

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
873 768	639 276	749 421	44 789	58 489	495 259	29 139	2 347 300	1 071 100	1	1	7	15, 16, 17
												15
119 772 *4 745	89 254 *3 325	9 579 (S)	2 475 *114	5 835 (S)	41 774 (S)	3 035 (S)	213 351 (S)	81 416 (S)	7 40	8 35	20 (S)	152 1521 1522
47 374	90 189	148	*615	832	*6 925	925	152 276	42 561	12	9	24	1531
(D) 139 676	11 433 295 364	*5 017 19 916	(S) 5 891	*740 3 616	6 417 35 593	643 3 100	77 820 471 352	25 675 139 220	22 5	18 3	46 26	154 1541 1542
												16
78 701	36 377	19 469	5 275	10 484	128 640	2 744	291 476	137 171	3	2	9	1611
7 306 49 525 22 433	(D) 23 014 *9 833	*4 075 28 277 *21 563	— 11 501 2 093	62 7 270 *7 220	2 693 73 310 28 504	513 1 820 1 330	(D) 136 787 91 129	25 315 82 101 46 804	22 5 13	(D) 5 14	18 9 45	162 1622 1623 1629
												17
94 802	26 341	165 345	3 843	4 535	29 435	3 276	205 093	111 772	5	5	18	1711
7 085	658	16 453	331	441	2 755	814	31 799	21 068	8	8	21	1721
112 325	23 673	164 649	3 653	5 833	42 007	2 805	207 144	109 824	3	3	14	1731
(D) 24 108 2 815	(D) *3 276 138	23 661 60 666 5 986	465 800 48	(D) 1 116 (S)	4 071 7 625 472	728 1 801 143	30 776 83 570 7 783	18 718 51 118 5 041	15 15 21	13 15 7	(D) 23 (S)	174 1741 1742 1743
16 553 6 546	(S) 806	(S) 9 806	(S) 256	*802 611	3 030 2 201	419 156	17 146 12 251	6 523 4 291	15 13	14 15	50 5	175 1751 1752
27 245	2 199	34 577	1 013	844	12 274	1 518	89 298	53 825	8	7	28	1761
25 572	4 163	48 227	1 171	2 135	15 151	1 339	74 546	41 571	11	8	26	1771
6 193	132	5 420	123	311	9 527	191	10 787	6 278	12	11	30	1781
10 094 4 457 *9 733 633 4 518 28 010	477 (D) (S) (D) (D) 3 310	10 214 6 316 *9 266 1 435 7 577 37 903	521 215 *912 (D) 187 (D)	1 215 55 *1 172 (D) *148 2 441	*8 296 1 490 *11 631 (D) 2 473 (D)	174 131 225 93 49 941	6 637 8 543 10 979 4 542 5 082 37 849	4 736 5 118 9 236 3 480 3 933 23 986	21 15 26 (D) 11 (D)	13 (D) (D) (D) (D) 15	11 (Z) 69 (D) 59 34	179 1791 1793 1794 1795 1796 1799

CONSTRUCTION—GEOGRAPHIC AREA SERIES

NEW MEXICO NM—7

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	4 001	3 707	3 496	3 375	1	2	3	4
Proprietors and working partners.....	2 305	1 123	1 438	2 270	3	7	5	7
All employees**	30 888	29 139	30 390	30 032	1	2	2	2
Construction workers:								
March.....	22 788	21 575	23 785	23 801	2	2	2	2
May	25 179	23 484	24 551	26 469	2	2	2	2
August	26 999	25 287	26 424	27 201	2	2	2	2
November.....	24 910	22 588	24 531	26 942	2	2	2	2
Average	24 969	23 233	25 156	26 121	2	2	2	2
Other employees:								
March.....	5 876	5 862	5 040	3 820	2	2	3	3
May	5 823	5 931	(NA)	(NA)	2	3	(NA)	(NA)
August	5 960	6 054	(NA)	(NA)	2	2	(NA)	(NA)
November.....	6 016	5 775	(NA)	(NA)	2	2	(NA)	(NA)
Average	5 919	5 905	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	609 996	499 966	453 335	306 872	1	1	1	1
Payroll, construction workers	442 039	370 116	359 365	252 822	1	1	2	1
Payroll, other employees	167 957	129 849	93 970	54 050	2	2	2	2
First quarter payroll, all employees	134 127	111 562	101 131	65 576	2	2	2	1
Fringe benefits, all employees	138 567	108 448	84 528	54 125	2	2	2	1
Legally required expenditures.....	104 570	78 707	60 922	34 508	2	2	2	1
Voluntary expenditures.....	33 998	29 741	23 605	19 616	3	2	2	1
Dollar value of business done	2 825 069	2 425 639	1 823 933	1 228 220	2	2	2	2
Value of construction work	2 789 755	2 347 300	1 734 554	1 180 749	2	2	2	2
Value of construction work subcontracted in from others	749 421	575 128	415 535	297 198	4	3	3	3
Other business receipts	35 313	50 172	71 330	47 471	11	9	3	4
Net value of construction†	2 150 479	1 769 937	1 360 448	963 978	1	2	2	2
Value added††	1 312 024	1 071 100	846 845	555 831	1	2	2	2
Selected costs	1 513 044	1 326 372	959 039	653 519	3	2	2	2
Materials, components, and supplies	818 509	705 932	537 369	396 499	2	2	2	2
Construction work subcontracted out to others	639 276	577 363	374 105	216 771	5	3	3	3
Selected power, fuels, and lubricants	55 259	43 076	47 563	40 248	2	2	2	1
Electricity.....	7 365	5 076	4 835	9 032	7	3	4	1
Natural gas	2 893	2 263	2 794	5 886	11	3	5	1
Gasoline and diesel fuel	41 304	31 641	37 146	21 391	2	2	2	2
On highway use.....	28 105	22 312	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use.....	13 198	9 329	(NA)	(NA)	3	3	(NA)	(NA)
Other, including lubricating oils and greases.....	3 698	4 095	2 787	3 940	4	4	5	4
Rental cost for machinery, equipment, and buildings	44 789	43 671	31 043	17 331	3	3	3	2
For machinery and equipment	32 673	30 178	24 783	14 154	4	4	3	2
For buildings.....	12 115	13 493	6 259	3 177	7	4	5	6
Selected purchased services	62 286	45 965	43 165	37 284	6	3	2	2
Communication services	14 588	10 092	9 531	5 076	5	3	3	3
Repairs to buildings and other structures	3 645	2 610	1 795	1 775	7	15	6	15
Repairs to machinery and equipment	44 052	33 263	31 839	30 433	7	3	2	1
Ownership of construction projects:								
Value of construction work	2 789 755	2 347 300	1 734 554	1 180 749	2	2	2	2
Government owned	974 139	858 817	509 711	367 665	4	4	3	1
Federal	373 681	343 123	(NA)	(NA)	7	4	(NA)	(NA)
State and local	600 458	515 693	(NA)	(NA)	5	5	(NA)	(NA)
Privately owned	1 815 616	1 488 482	1 224 842	813 084	5	3	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	476 638	386 825	4	3
Capital expenditures, other than land -----	58 489	35 992	7	4
New -----	40 351	23 260	5	4
Used -----	18 138	12 731	19	8
Retirements and disposition of depreciable assets -----	(S)	30 357	(S)	7
End-of-year gross book value of depreciable assets -----	495 259	392 459	4	3
Depreciation charges during year -----	47 990	45 104	5	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	77 466	63 703	12	9
Capital expenditures, other than land -----	3 971	5 362	21	12
New buildings and other structures -----	3 319	2 160	24	11
Used buildings and other structures -----	652	3 201	23	19
Retirements and disposition of depreciable assets -----	(S)	2 342	(S)	17
End-of-year gross book value of depreciable assets -----	62 613	66 722	15	9
Depreciation charges during year -----	5 240	6 066	7	17
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	399 172	323 121	4	3
Capital expenditures, other than land -----	54 518	30 630	7	4
New machinery and equipment, including automobiles and trucks -----	37 032	21 099	5	4
New automobiles and trucks, intended primarily for highway use -----	18 535	11 089	9	6
Used machinery and equipment, including automobiles and trucks -----	17 487	9 530	19	9
Retirements and disposition of depreciable assets -----	21 044	28 015	12	7
End-of-year gross book value of depreciable assets -----	432 646	325 736	3	3
Depreciation charges during year -----	42 750	39 038	5	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	4 001	1
Value of construction work	2 789 755	2
Establishments with inventories:		
Number	1 268	4
Value of construction work	1 087 716	2
Inventories ¹ :		
End of 1992, materials and supplies	32 160	10
End of 1991, materials and supplies	30 807	10
Establishments with no inventories:		
Number	1 534	4
Value of construction work	1 221 176	3
Establishments not reporting:		
Number	1 199	4
Value of construction work	480 864	4

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	4 001	2 569	702	434	215	53	22	5	1	—	
All employees** -----	30 888	4 844	4 431	5 866	6 487	3 562	3 212	2 486	(D)	—	
Payroll, all employees -----	609 996	63 852	69 184	104 887	142 723	78 029	77 321	74 001	(D)	—	
Dollar value of business done -----	2 825 069	410 949	344 175	486 185	657 536	315 140	348 161	262 923	(D)	—	
Value of construction work -----	2 789 755	404 579	337 838	480 976	646 383	311 780	345 276	262 923	(D)	—	
Net value of construction work† -----	2 150 479	328 295	273 618	353 454	496 246	237 923	231 692	229 251	(D)	—	
Value added†† -----	1 312 024	179 084	155 154	219 756	308 836	144 649	137 449	167 097	(D)	—	
Cost of materials, components, supplies, and fuels -----	873 768	155 581	124 801	138 907	198 563	96 634	97 128	62 154	(D)	—	
Cost of construction work subcontracted out to others -----	639 276	76 284	64 220	127 522	150 137	73 857	113 584	33 672	(D)	—	
Rental cost for machinery, equipment, and buildings -----	44 789	4 856	3 901	6 223	10 777	7 745	6 514	4 772	(D)	—	
Capital expenditures, other than land -----	58 489	6 960	7 230	12 972	14 233	5 343	7 965	3 785	(D)	—	
End-of-year gross book value of depreciable assets -----	495 259	49 197	54 787	76 475	107 158	61 926	88 682	57 035	(D)	—	
1987											
All employees** -----	29 139	(S)	4 692	5 306	6 931	3 576	2 983	1 423	—	—	
Value of construction work -----	2 347 300	(S)	330 750	368 111	565 110	330 687	306 825	123 309	—	—	
Value added†† -----	1 071 100	(S)	159 349	169 943	254 189	158 406	125 375	60 378	—	—	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	5	8	8	4	(Z)	(Z)	(Z)	(D)	—	
Net value of construction work† -----	1	7	9	8	3	(Z)	(Z)	(Z)	(D)	—	
Capital expenditures, other than land -----	7	17	19	24	6	(Z)	(Z)	(Z)	(D)	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	4 001	(S)	(S)	601	1 115	646	482	304	111	44	38
All employees** -----	30 888	(S)	(S)	1 024	3 445	3 438	5 108	5 421	3 613	2 701	5 580
Payroll, all employees -----	609 996	(S)	(S)	9 433	41 509	50 292	82 700	109 184	87 593	66 979	157 903
Dollar value of business done -----	2 825 069	(S)	(S)	43 022	180 022	226 937	341 130	471 136	378 819	292 543	875 284
Value of construction work -----	2 789 755	(S)	(S)	42 572	177 418	225 498	334 874	464 648	368 972	291 352	868 398
Net value of construction work† -----	2 150 479	(S)	(S)	37 721	159 534	192 706	284 183	389 442	281 300	208 532	582 513
Value added†† -----	1 312 024	(S)	(S)	22 440	94 650	114 369	169 701	221 778	171 565	128 578	380 523
Cost of materials, components, supplies, and fuels -----	873 768	(S)	(S)	15 731	67 488	79 777	120 739	174 152	119 581	81 145	208 876
Cost of construction work subcontracted out to others -----	639 276	(S)	(S)	4 850	17 884	32 791	50 691	75 206	87 673	82 820	285 885
Rental cost for machinery, equipment, and buildings -----	44 789	(S)	(S)	(S)	3 060	2 476	3 498	8 174	7 163	7 951	11 695
Capital expenditures, other than land -----	58 489	(S)	(S)	(S)	4 398	4 029	10 576	12 694	9 153	4 045	11 833
End-of-year gross book value of depreciable assets -----	495 259	(S)	(S)	8 947	31 059	31 954	65 170	78 582	79 640	44 084	153 093
1987											
All employees** -----	29 139	(S)	(S)	(S)	(S)	(S)	4 010	6 329	3 588	2 344	4 024
Value of construction work -----	2 347 300	(S)	(S)	(S)	(S)	(S)	254 756	490 206	328 941	295 859	560 945
Value added†† -----	1 071 100	(S)	(S)	(S)	(S)	(S)	134 543	226 094	156 912	128 018	205 455
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	12	9	10	9	6	3	1	(Z)
Net value of construction work† -----	1	(S)	(S)	10	7	9	9	7	4	4	1
Capital expenditures, other than land -----	7	(S)	(S)	(S)	21	25	30	10	8	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

NM-10 NEW MEXICO

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	2 789 755	1 749 705	634 894	261 913	2	3	3	4
Building construction	1 903 200	1 336 370	407 583	159 246	2	3	4	5
Single-family houses	796 570	626 404	105 705	64 461	5	7	6	10
Single-family houses, detached	752 879	596 106	99 055	57 718	6	7	7	11
Single-family houses, attached, including townhouses and townhouse-type condominiums	43 691	30 298	6 651	6 742	14	18	14	17
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	38 922	27 974	5 060	5 888	10	14	12	12
Other residential buildings, including hotels, motels, and tourist cabins	20 818	11 448	*4 346	5 024	19	27	41	37
Office buildings	145 655	75 561	55 249	14 845	7	6	14	6
Other commercial buildings such as stores, restaurants, and automobile service stations	231 525	154 872	51 937	24 716	6	8	11	11
Industrial buildings and warehouses	212 268	135 505	52 572	24 191	3	4	5	13
Industrial buildings	184 495	115 888	46 613	21 993	3	3	6	13
Warehouses	27 773	19 617	(S)	2 197	9	11	(S)	25
Religious buildings	24 241	14 001	7 327	2 913	8	6	22	20
Educational buildings	194 638	127 715	60 433	6 491	5	5	10	11
Hospitals and institutional buildings	140 216	96 225	37 550	6 441	4	4	6	16
Other nonresidential buildings	98 347	66 667	27 404	4 277	7	7	14	23
Nonbuilding construction	743 311	413 334	227 310	102 667	2	3	5	5
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	238 794	107 483	105 030	26 281	3	4	5	13
Fencing	24 089	17 875	(D)	(D)	28	28	(D)	(D)
Conservation and development construction	14 527	*11 608	(D)	(D)	32	40	(D)	(D)
Power and communication transmission lines, towers, and related facilities	54 035	(S)	15 227	7 590	9	(S)	7	15
Sewers, water mains, and related facilities	94 579	59 897	22 067	12 614	8	10	19	11
Sewers, sewer lines, septic systems, and related facilities	49 715	27 855	14 123	7 738	10	8	30	17
Water mains and related facilities	44 864	32 043	7 945	4 876	11	16	10	8
Pipeline construction other than sewer or water lines	77 972	48 243	13 780	15 949	3	4	3	3
Blast furnaces, petroleum refineries, chemical complexes, etc.	56 084	47 968	*1 765	6 351	4	4	49	7
Oilfields	20 195	13 360	*1 862	*4 972	27	23	49	48
Other nonbuilding construction	163 038	75 682	62 348	25 008	6	5	12	7
Construction work, n.s.k.	143 244	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
1987								
Value of construction work	2 347 300	1 552 807	458 052	238 692	2	3	3	4
Building construction	1 589 549	1 161 613	305 861	120 217	3	4	4	4
Single-family houses	574 231	455 460	74 789	43 982	5	6	7	8
Single-family houses, detached	531 216	421 145	68 996	41 073	5	7	7	8
Single-family houses, attached, including townhouses and townhouse-type condominiums	43 015	34 315	5 793	2 909	13	14	28	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	51 583	38 530	5 302	7 751	8	10	11	17
Other residential buildings, including hotels, motels, and tourist cabins	41 030	29 271	5 660	6 097	18	24	19	18
Office buildings	177 046	114 115	47 670	15 260	9	13	8	7
Other commercial buildings such as stores, restaurants, and automobile service stations	244 229	175 071	49 583	19 574	6	7	10	9
Industrial buildings and warehouses	203 527	147 001	42 154	14 371	5	7	7	5
Industrial buildings	175 069	124 092	38 374	12 602	6	8	8	6
Warehouses	28 458	22 909	3 780	1 769	7	9	8	13
Religious buildings	27 886	20 132	5 370	2 383	12	16	6	15
Educational buildings	179 853	123 236	50 663	5 952	5	5	9	6
Hospitals and institutional buildings	45 697	27 460	15 194	3 042	8	5	21	9
Other nonresidential buildings	44 462	32 690	9 482	2 286	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	660 000	389 835	152 179	117 985	2	2	3	8
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	313 765	183 093	99 089	31 582	2	2	3	11
Fencing	13 429	10 984	1 111	1 333	16	17	17	14
Conservation and development construction	8 420	6 418	*313	1 689	11	8	41	16
Power and communication transmission lines, towers, and related facilities	25 286	14 920	2 415	7 950	8	6	9	18
Sewers, water mains, and related facilities	82 115	56 517	12 818	12 779	6	7	5	15
Sewers, sewer lines, septic systems, and related facilities	38 634	25 515	5 692	7 426	6	6	6	24
Water mains and related facilities	43 481	31 002	7 125	5 353	8	10	5	11
Pipeline construction other than sewer or water lines	43 063	26 618	2 104	*14 340	17	2	18	52
Oilfields	7 333	3 733	526	3 074	6	7	18	4
Other nonbuilding construction	166 589	112 580	34 418	63 978	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	97 749	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	4 001	24 969	22 788	25 179	26 999	24 910	1	2	2	2	2	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	1 015	2 742	2 432	2 647	3 189	2 698	4	7	7	6	11	8
1522	Other residential buildings -----	28	93	78	103	89	*103	39	39	39	33	34	60
1531	Operative builders -----	125	386	337	392	422	392	16	16	15	16	16	17
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	70	386	340	386	370	448	28	22	24	23	25	19
1542	Nonresidential buildings, n.e.c. -----	233	2 819	2 526	2 770	3 154	2 826	12	5	4	6	5	5
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	51	1 885	1 697	2 010	2 012	1 820	21	3	3	3	3	3
162	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction -----	(S)	118	124	126	111	110	(S)	19	18	22	15	20
1623	Water, sewer, and utility lines -----	80	2 469	2 036	2 494	2 811	2 536	18	4	5	6	5	4
1629	Heavy construction, n.e.c. -----	112	1 001	1 057	1 077	839	1 031	18	14	13	13	24	12
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	498	2 538	2 330	2 567	2 704	2 550	5	5	5	6	6	6
1721	Painting and paper hanging -----	158	511	427	516	546	558	7	8	10	9	10	10
1731	Electrical work -----	518	3 128	3 028	3 101	3 182	3 200	4	3	3	3	3	4
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	108	692	633	712	762	660	15	14	10	12	17	18
1742	Plastering, drywall, and insulation work -----	169	1 347	1 272	1 408	1 481	1 229	11	15	17	17	18	12
1743	Terrazzo, tile, marble, and mosaic work -----	33	(S)	(S)	75	(S)	54	23	(S)	(S)	20	(S)	(Z)
175	Carpentry and floor work:												
1751	Carpentry -----	139	632	667	661	651	547	13	15	16	15	15	17
1752	Floor laying and other floor work -----	56	125	117	114	134	134	9	16	17	17	14	15
1761	Roofing, siding, and sheet metal work -----	141	969	869	932	1 126	949	4	8	9	9	10	9
1771	Concrete work -----	139	835	756	855	860	869	12	11	12	10	12	12
1781	Water well drilling -----	55	138	121	132	161	139	21	12	11	10	10	11
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	23	347	359	358	339	334	25	24	21	24	26	27
1793	Glass and glazing work -----	31	79	75	80	82	80	27	18	19	18	17	18
1794	Excavation work -----	60	420	353	456	453	420	18	27	21	28	28	27
1795	Wrecking and demolition work -----	3	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	16	263	219	239	277	315	22	12	14	13	11	10
1799	Special trade contractors, n.e.c. -----	136	(D)	(D)	(D)	(D)	(D)	15	(D)	(D)	(D)	(D)	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	7.7	19.7	111.7	.219	.313	.229	.269	.016
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.5	14.3	119.8	.153	.365	.272	.029	.008
1522	Other residential buildings -----	4.8	12.9	118.4	.157	.431	.302	(S)	*.010
1531	Operative builders -----	5.3	24.9	597.7	.072	.205	.391	.001	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	7.0	19.5	84.0	.297	(D)	.353	*.155	(S)
1542	Nonresidential buildings, n.e.c. -----	16.0	26.8	224.7	.158	.220	.466	.031	.009
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	42.5	22.5	114.0	.226	.366	.169	.091	.025
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	*18.1	(D)	157.2	(D)	.394	(D)	*.220	—
1623	Water, sewer, and utility lines -----	35.3	22.9	80.3	.325	.250	.116	.143	.058
1629	Heavy construction, n.e.c. -----	10.7	19.4	84.3	.274	.266	.117	*.256	.025
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	6.7	19.7	96.1	.267	.389	.108	.678	.016
1721	Painting and paper hanging -----	3.7	14.3	48.0	.339	.289	.027	.671	.014
1731	Electrical work -----	7.7	22.5	97.7	.294	.368	.077	.539	.012
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	7.0	13.1	(D)	(D)	(D)	(D)	(D)	(D)
1742	Plastering, drywall, and insulation work -----	9.2	15.8	50.9	.361	.352	.048	.885	.012
1743	Terrazzo, tile, marble, and mosaic work -----	3.0	14.6	(S)	.235	.453	.022	.964	.008
175	Carpentry and floor work:								
1751	Carpentry -----	5.4	15.0	74.2	.240	.353	(S)	(S)	(S)
1752	Floor laying and other floor work -----	2.8	16.0	109.7	.181	.477	.059	.715	.019
1761	Roofing, siding, and sheet metal work -----	8.2	15.2	68.5	.266	.411	.033	.521	.015
1771	Concrete work -----	7.2	16.5	74.3	.266	.412	.067	.777	.019
1781	Water well drilling -----	3.0	19.6	97.2	.241	.462	.010	.404	.009
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	17.6	17.9	60.3	.338	.482	.023	.488	.025
1793	Glass and glazing work -----	3.3	21.3	113.1	.241	.499	(D)	.707	.024
1794	Excavation work -----	8.2	15.8	71.3	.260	.325	(S)	*.309	*.030
1795	Wrecking and demolition work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	19.6	16.5	53.6	.368	.320	(D)	.537	.013
1799	Special trade contractors, n.e.c. -----	(D)	(D)	(D)	.251	.375	.044	.507	(D)

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992**

[Not applicable]

Contents

Utah

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Utah. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 13,811 establishments in this State operating in the construction industries. These establishments accounted for \$4.2 billion in total dollar value of business done.

Most of the 13,811 construction establishments were small. Of the total, 9,445 were nonemployers, and over half of the employer establishments had less than 5 employees. The 1,917 construction establishments with 5 employees or more, while representing only 14 percent of all establishments, accounted for more than 82 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$3.9 billion in total dollar value of business done. Of this amount, \$3.8 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.1 billion, leaving net value of construction work of \$2.7 billion. In addition, these establishments paid out \$1.3 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$1.6 billion. (See Introduction and appendixes for explanation of terms.)

There were 4,366 establishments with total employment averaging 34,950 during the year. Total payroll for 1992 was \$775 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 9,445 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$349 million. Most of these establishments, about 82 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992 
1987 

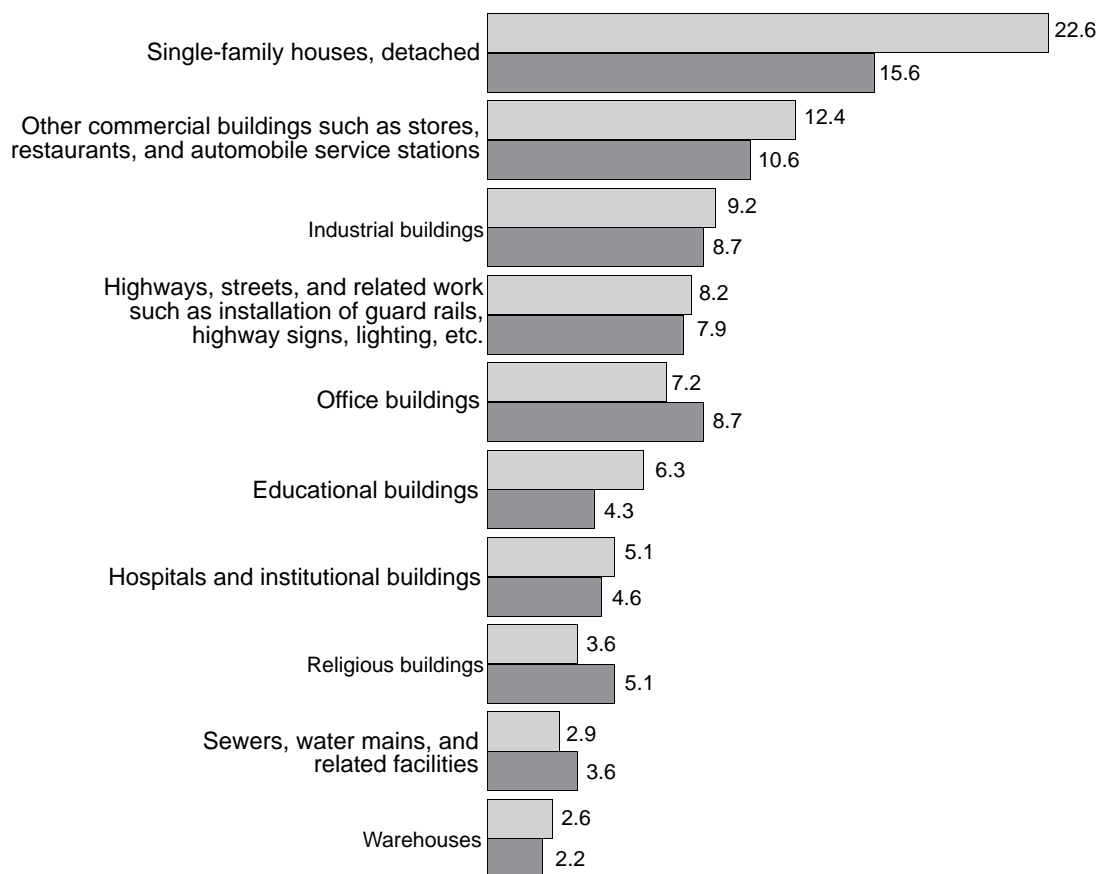



Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992 
1987 

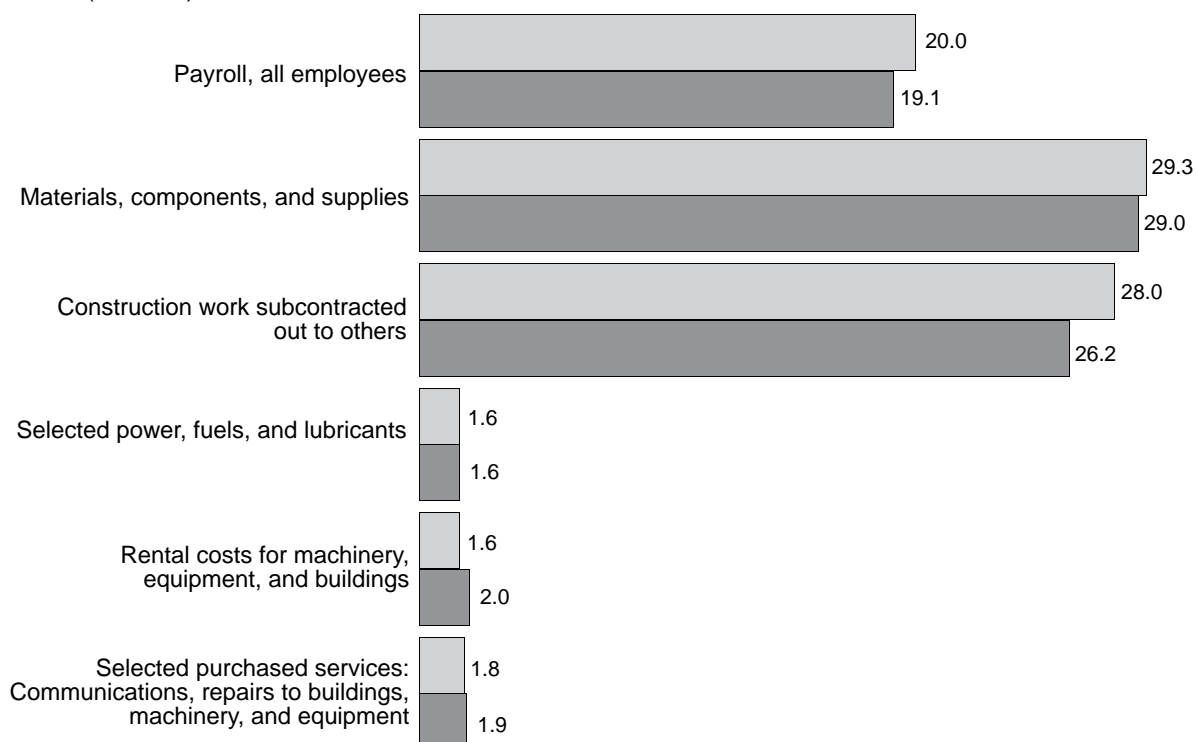


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	13 811	11 590	34 950	4 222 479	9 445	9 295	349 029	4 366	2 295	34 950	3 873 450	1	1
15	Building construction—General contractors and operative builders ----	2 796	2 058	9 158	1 837 974	1 524	1 421	140 472	1 272	637	9 158	1 697 502	3	3
16	Heavy construction other than building construction—contractors -----	473	270	5 945	695 173	168	158	7 822	305	112	5 945	687 351	3	2
17	Special trade contractors -----	10 542	9 261	19 847	1 689 331	7 753	7 716	200 735	2 789	1 545	19 847	1 488 596	2	2
1711	Plumbing, heating, and air-conditioning --	1 181	879	4 480	464 491	606	601	24 211	575	278	4 480	440 280	3	3
1731	Electrical work-----	855	667	3 278	284 441	501	496	11 774	354	(S)	3 278	272 667	5	3
	1987													
15, 16, 17	Construction industries² -----	14 950	12 119	27 287	3 345 984	11 110	11 003	550 629	3 840	1 116	27 287	2 795 355	2	2
15	Building construction—General contractors and operative builders ----	3 639	2 651	(D)	1 350 265	2 528	2 390	210 038	1 111	261	(D)	1 140 227	(D)	4
16	Heavy construction other than building construction—contractors -----	495	262	(D)	532 607	224	224	16 705	271	38	(D)	515 902	(D)	2
17	Special trade contractors -----	10 459	8 902	16 212	1 386 371	8 063	8 102	262 847	2 396	800	16 212	1 123 524	3	2
1711	Plumbing, heating, and air-conditioning --	1 182	820	3 774	342 937	720	726	35 127	462	94	3 774	307 810	7	3
1731	Electrical work-----	831	655	2 612	211 512	508	504	16 057	323	151	2 612	195 455	4	5

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	4 366	34 950	27 708	775 340	581 218	3 774 719	2 691 420	1 592 868
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	850	3 683	2 869	59 887	44 630	415 066	286 142	156 335
1522	Other residential buildings -----	43	210	150	3 349	2 428	17 197	11 408	*6 612
1531	Operative builders -----	104	616	393	13 613	6 793	185 144	106 147	56 120
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	57	759	606	20 442	15 047	113 257	60 796	28 984
1542	Nonresidential buildings, n.e.c. -----	218	3 891	2 830	99 344	64 474	934 192	361 116	216 246
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction -----	75	2 514	2 058	67 241	50 953	299 262	224 831	141 384
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	*9	137	117	3 564	2 656	21 760	10 710	6 154
1623	Water, sewer, and utility lines -----	81	1 523	1 220	36 245	28 005	131 398	117 992	70 541
1629	Heavy construction, n.e.c. -----	140	1 771	1 469	47 341	37 698	192 050	159 246	104 349
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	575	4 480	3 485	112 188	85 044	428 277	369 042	203 812
1721	Painting and paper hanging -----	234	1 104	918	16 532	13 796	52 127	50 823	36 432
1731	Electrical work -----	354	3 278	2 601	85 349	66 740	270 236	260 857	158 854
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	210	1 134	1 013	20 491	18 081	(D)	(D)	40 054
1742	Plastering, drywall, and insulation work -----	216	2 244	1 952	41 311	33 317	128 771	120 730	65 368
1743	Terrazzo, tile, marble, and mosaic work -----	70	428	336	7 651	5 850	21 808	21 432	12 244
175	Carpentry and floor work:								
1751	Carpentry -----	255	865	697	12 939	10 286	43 879	38 511	25 902
1752	Floor laying and other floor work -----	63	242	184	3 820	2 965	24 254	21 085	9 877
1761	Roofing, siding, and sheet metal work -----	191	1 786	1 421	30 857	22 244	117 990	113 487	64 996
1771	Concrete work -----	246	1 423	1 170	24 991	19 985	89 697	85 658	49 912
1781	Water well drilling -----	17	*75	*66	*1 219	*1 063	*5 813	*5 699	*3 540
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	51	565	460	19 108	14 933	57 168	49 285	28 750
1793	Glass and glazing work -----	18	99	66	2 155	1 506	10 059	(D)	(D)
1794	Excavation work -----	86	530	447	10 716	8 743	41 409	38 950	31 446
1795	Wrecking and demolition work -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	37	288	222	6 476	5 350	26 229	26 000	15 340
1799	Special trade contractors, n.e.c. -----	166	(D)	(D)	(D)	(D)	(D)	80 413	54 499

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
1 197 283	1 083 299	1 157 015	63 675	87 670	610 777	27 287	2 698 609	1 181 307	1	1	5	15, 16, 17
												15
138 183	128 923	14 394	1 936	5 005	29 896	1 495	166 365	57 224	7	7	17	152
6 209	5 789	*798	127	483	1 285	283	32 014	15 853	29	19	22	1521
58 378	78 997	*2 220	1 097	(S)	8 017	(D)	(D)	23 197	14	13	(S)	1531
31 924	52 461	6 125	5 699	3 759	20 299	726	109 874	32 195	12	10	17	154
159 264	573 076	9 945	6 775	7 335	51 195	3 152	636 672	175 794	4	4	15	1542
												16
118 421	74 431	61 151	10 802	17 357	175 181	2 076	245 015	140 650	4	2	11	1611
4 556	11 050	6 127	517	660	5 974	(D)	(D)	5 057	19	20	16	162
51 252	13 407	18 453	8 458	9 549	49 795	1 321	108 597	62 338	8	7	36	1622
(D)	32 804	(D)	5 010	8 086	56 252	1 227	124 332	79 102	8	5	12	1623
												17
177 233	59 235	282 731	6 207	6 010	46 186	3 774	301 199	140 228	3	3	18	1711
16 037	1 305	33 950	462	1 369	6 044	750	31 233	21 617	13	12	38	1721
104 434	9 379	183 166	3 880	6 650	39 100	2 612	192 262	100 874	5	3	12	1731
(D)	(D)	51 248	888	(D)	6 770	955	45 818	28 688	8	(D)	(D)	174
55 751	(S)	119 126	1 643	1 899	10 258	1 663	93 514	52 744	7	6	18	1742
9 195	377	17 054	254	201	(S)	258	15 734	7 829	7	7	24	1743
												175
(S)	5 368	25 717	353	556	3 949	600	36 597	18 700	8	8	20	1751
11 290	*3 169	16 201	432	381	1 605	161	11 672	5 136	11	22	39	1752
50 798	4 502	67 575	1 092	1 238	12 393	1 501	100 378	49 933	8	6	25	1761
36 891	4 039	39 465	*2 833	2 381	15 026	1 479	78 415	48 728	11	11	18	1771
*2 159	(S)	(S)	80	(S)	*4 329	20	930	601	50	49	(S)	1781
												179
20 674	7 883	52 129	*848	*1 870	*9 297	483	58 887	26 323	12	8	65	1791
6 787	(D)	8 051	95	178	1 450	91	5 540	3 288	10	(D)	15	1793
7 574	2 460	36 542	1 351	3 145	30 998	545	55 406	33 884	15	15	23	1794
(D)	(D)	(D)	(D)	(D)	(D)	162	5 491	3 611	(D)	(D)	(D)	1795
10 985	229	*15 490	*748	*1 206	*5 512	152	11 704	7 817	30	24	48	1796
(D)	(D)	58 230	(D)	2 939	(D)	1 006	53 546	35 389	(D)	11	32	1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	4 366	3 840	3 715	4 389	1	2	3	4
Proprietors and working partners.....	2 295	1 116	1 409	2 773	3	7	5	6
All employees**	34 950	27 287	29 501	34 603	1	2	2	2
Construction workers:								
March.....	24 305	19 414	21 167	25 508	1	2	2	2
May	28 258	21 516	24 699	30 258	2	2	2	2
August	30 324	23 387	27 481	33 246	1	2	2	2
November.....	27 945	21 874	24 111	30 974	1	2	2	2
Average.....	27 708	21 548	24 680	30 018	1	2	2	2
Other employees:								
March.....	7 084	5 631	4 628	4 365	2	2	2	3
May	7 196	5 624	(NA)	(NA)	2	2	(NA)	(NA)
August	7 428	6 086	(NA)	(NA)	2	4	(NA)	(NA)
November.....	7 258	5 624	(NA)	(NA)	2	2	(NA)	(NA)
Average.....	7 242	5 741	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	775 340	535 088	512 402	425 914	1	1	1	1
Payroll, construction workers	581 218	402 087	410 477	349 978	1	1	1	1
Payroll, other employees	194 121	133 001	101 925	75 936	2	2	2	2
First-quarter payroll, all employees	162 953	115 557	109 025	85 817	2	2	2	1
Fringe benefits, all employees	173 875	115 764	96 406	75 658	2	2	1	1
Legally required expenditures.....	124 370	79 867	68 336	42 884	2	2	1	2
Voluntary expenditures.....	49 505	35 896	28 070	32 774	2	3	2	1
Dollar value of business done	3 873 450	2 795 355	2 281 233	1 828 645	1	2	1	2
Value of construction work	3 774 719	2 698 609	2 206 144	1 742 122	1	2	1	2
Value of construction work subcontracted in from others	1 157 015	639 002	530 050	443 115	3	5	3	2
Other business receipts	98 730	70 650	55 125	86 523	4	4	4	5
Net value of construction†	2 691 420	1 966 934	1 621 730	1 299 582	1	2	2	2
Value added††	1 592 868	1 181 307	979 248	753 766	1	2	1	1
Selected costs	2 280 582	1 587 952	1 282 021	1 037 685	2	2	2	2
Materials, components, and supplies	1 134 295	810 498	644 852	563 169	2	2	2	2
Construction work subcontracted out to others	1 083 299	731 675	584 414	442 540	2	3	2	3
Selected power, fuels, and lubricants	62 988	45 778	52 755	31 977	2	2	3	2
Electricity.....	7 061	5 518	5 634	3 386	4	4	6	4
Natural gas	3 577	2 145	2 816	2 255	7	4	5	5
Gasoline and diesel fuel	48 077	34 785	41 101	22 488	2	2	2	2
On highway use.....	33 292	21 966	(NA)	(NA)	3	2	(NA)	(NA)
Off highway use.....	14 786	12 818	(NA)	(NA)	3	3	(NA)	(NA)
Other, including lubricating oils and greases.....	4 272	3 329	3 204	3 848	3	4	4	5
Rental cost for machinery, equipment, and buildings	63 675	54 986	33 535	24 966	5	4	4	2
For machinery and equipment	47 540	40 279	25 734	21 447	6	4	5	2
For buildings.....	16 135	14 706	7 801	3 520	6	4	4	5
Selected purchased services	71 348	52 778	47 692	31 864	4	3	2	2
Communication services	17 565	10 852	8 801	6 188	5	4	3	3
Repairs to buildings and other structures	4 472	2 198	1 506	1 629	12	11	5	8
Repairs to machinery and equipment	49 312	39 727	37 385	24 047	4	4	3	2
Ownership of construction projects:								
Value of construction work	3 774 719	2 698 609	2 206 144	1 742 122	1	2	1	2
Government owned	1 160 001	907 520	415 649	305 463	4	4	5	1
Federal	362 077	373 219	(NA)	(NA)	4	8	(NA)	(NA)
State and local	797 924	534 301	(NA)	(NA)	6	4	(NA)	(NA)
Privately owned	2 614 718	1 791 089	1 790 495	1 436 659	3	3	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	548 972	507 266	3	3
Capital expenditures, other than land -----	87 670	50 893	5	5
New -----	60 329	35 850	5	4
Used -----	27 341	15 043	15	11
Retirements and disposition of depreciable assets -----	25 866	36 945	3	8
End-of-year gross book value of depreciable assets -----	610 777	521 214	3	3
Depreciation charges during year -----	62 075	57 333	3	4
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	64 347	79 207	12	9
Capital expenditures, other than land -----	8 455	9 913	14	12
New buildings and other structures -----	6 848	7 045	17	7
Used buildings and other structures -----	(S)	2 867	(S)	35
Retirements and disposition of depreciable assets -----	2 173	7 768	9	29
End-of-year gross book value of depreciable assets -----	70 630	81 351	11	9
Depreciation charges during year -----	4 768	5 118	11	9
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	484 625	428 059	3	3
Capital expenditures, other than land -----	79 215	40 980	6	5
New machinery and equipment, including automobiles and trucks -----	53 481	28 804	5	5
New automobiles and trucks, intended primarily for highway use -----	19 694	11 030	7	8
Used machinery and equipment, including automobiles and trucks -----	25 734	12 175	16	10
Retirements and disposition of depreciable assets -----	23 693	29 176	3	8
End-of-year gross book value of depreciable assets -----	540 147	439 863	3	3
Depreciation charges during year -----	57 307	52 215	4	4

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	4 366	1
Value of construction work	3 774 719	1
Establishments with inventories:		
Number	1 490	3
Value of construction work	1 734 283	2
Inventories ¹ :		
End of 1992, materials and supplies	32 492	7
End of 1991, materials and supplies	31 008	6
Establishments with no inventories:		
Number	1 537	4
Value of construction work	1 526 135	2
Establishments not reporting:		
Number	1 340	3
Value of construction work	514 301	5

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	4 366	(S)	1 064	505	254	67	24	3	—	—
All employees** -----	34 950	4 932	6 836	6 758	7 520	4 485	3 412	1 005	—	—
Payroll, all employees -----	775 340	70 979	120 217	136 673	183 963	120 412	110 743	32 353	—	—
Dollar value of business done -----	3 873 450	429 474	589 722	645 861	869 991	559 959	578 089	200 353	—	—
Value of construction work -----	3 774 719	424 347	576 244	638 429	859 495	550 932	525 367	199 905	—	—
Net value of construction work† -----	2 691 420	347 405	456 296	468 775	615 893	369 887	<u>433 164</u>	(D)	—	—
Value added†† -----	1 592 868	195 369	247 753	255 129	377 164	223 126	249 928	44 399	—	—
Cost of materials, components, supplies, and fuels -----	1 197 283	157 163	222 021	221 079	249 225	155 788	<u>192 007</u>	(D)	—	—
Cost of construction work subcontracted out to others -----	1 083 299	76 942	119 948	169 654	243 603	181 045	<u>292 108</u>	(D)	—	—
Rental cost for machinery, equipment, and buildings -----	63 675	6 160	9 550	12 745	13 854	9 310	10 498	1 558	—	—
Capital expenditures, other than land -----	87 670	12 292	9 846	15 588	22 284	13 765	<u>13 896</u>	(D)	—	—
End-of-year gross book value of depreciable assets -----	610 777	59 683	82 049	100 426	122 886	83 083	<u>162 650</u>	(D)	—	—
1987										
All employees** -----	27 287	4 786	5 242	5 547	5 817	3 682	2 212	(D)	—	—
Value of construction work -----	2 698 609	445 036	371 985	531 203	621 621	429 527	<u>299 235</u>	(D)	—	—
Value added†† -----	1 181 307	170 568	179 666	220 486	280 453	178 247	<u>151 886</u>	(D)	—	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	5	7	7	4	(Z)	(Z)	(Z)	—	—
Net value of construction work† -----	1	6	7	6	3	(Z)	(Z)	(D)	—	—
Capital expenditures, other than land -----	5	14	15	16	14	(Z)	(Z)	(D)	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	4 366	(S)	(S)	(S)	1 166	820	647	358	168	78	53
All employees** -----	34 950	(S)	(S)	(S)	3 699	4 464	5 725	5 831	4 742	3 423	5 597
Payroll, all employees -----	775 340	(S)	(S)	(S)	50 012	71 807	104 663	123 963	129 692	98 830	182 552
Dollar value of business done -----	3 873 450	(S)	(S)	(S)	190 864	288 016	431 663	543 063	587 563	546 389	1 231 080
Value of construction work -----	3 774 719	(S)	(S)	(S)	187 737	282 282	427 553	530 556	580 032	537 123	1 175 563
Net value of construction work† -----	2 691 420	(S)	(S)	(S)	169 133	257 204	366 140	425 895	452 775	370 193	600 448
Value added†† -----	1 592 868	(S)	(S)	(S)	105 582	149 732	210 616	254 933	256 186	202 559	383 135
Cost of materials, components, supplies, and fuels -----	1 197 283	(S)	(S)	(S)	66 678	113 206	159 634	183 469	204 120	176 901	272 830
Cost of construction work subcontracted out to others -----	1 083 299	(S)	(S)	(S)	18 604	25 078	61 413	104 661	127 257	166 930	575 115
Rental cost for machinery, equipment, and buildings -----	63 675	(S)	(S)	(S)	3 088	5 426	10 475	8 556	11 330	9 705	14 461
Capital expenditures, other than land -----	87 670	(S)	(S)	(S)	6 618	7 737	12 787	14 662	13 439	12 351	18 893
End-of-year gross book value of depreciable assets -----	610 777	(S)	(S)	(S)	34 353	57 198	80 810	77 708	81 847	78 318	192 831
1987											
All employees** -----	27 287	(S)	(S)	(S)	(S)	4 033	4 173	4 903	3 341	2 295	3 570
Value of construction work -----	2 698 609	(S)	(S)	(S)	(S)	236 747	298 613	463 257	401 885	388 857	683 743
Value added†† -----	1 181 307	(S)	(S)	(S)	(S)	118 951	145 742	195 693	194 630	144 943	261 921
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	(S)	7	8	7	6	2	2	(Z)
Net value of construction work† -----	1	(S)	(S)	(S)	7	8	7	7	4	4	1
Capital expenditures, other than land -----	5	(S)	(S)	(S)	17	19	17	23	7	2	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

UT-10 UTAH

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	3 774 719	2 655 308	725 026	301 478	1	2	3	3
Building construction	2 879 733	2 112 098	585 309	182 326	2	2	3	4
Single-family houses	924 501	715 308	154 014	55 180	4	5	8	8
Single-family houses, detached	853 306	665 205	140 793	47 308	5	6	8	8
Single-family houses, attached, including townhouses and townhouse-type condominiums	71 195	50 102	13 221	(S)	11	16	12	(S)
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	55 201	28 944	15 993	10 264	7	8	17	13
Other residential buildings, including hotels, motels, and tourist cabins	43 124	22 870	12 860	(S)	7	8	17	(S)
Office buildings	272 944	160 263	89 913	22 768	4	4	8	8
Other commercial buildings such as stores, restaurants, and automobile service stations	466 819	327 136	107 857	31 827	4	4	5	9
Industrial buildings and warehouses	443 954	332 990	79 404	31 560	3	3	4	8
Industrial buildings	346 700	253 266	65 511	27 923	4	4	4	8
Warehouses	97 254	79 724	13 893	3 637	5	5	9	12
Religious buildings	137 608	102 247	29 360	6 001	11	14	10	8
Educational buildings	239 003	178 944	52 350	7 708	5	5	7	16
Hospitals and institutional buildings	193 203	157 265	28 704	7 234	4	4	10	20
Amusement, social, and recreational buildings, indoors	31 146	26 271	*4 016	859	7	5	44	17
Other nonresidential buildings	(S)	(S)	10 839	1 530	(S)	(S)	2	16
Nonbuilding construction	802 080	543 210	139 717	119 152	2	3	4	6
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	308 041	191 586	66 919	49 535	3	3	5	7
Private driveways and parking areas	32 020	15 186	*4 860	*11 974	25	31	40	41
Bridges, tunnels, and elevated highways	23 355	16 098	3 472	3 785	14	6	30	32
Conservation and development construction	38 514	30 580	3 299	4 635	14	18	30	21
Power and communication transmission lines, towers, and related facilities	42 356	28 639	11 892	*1 825	7	6	20	55
Sewers, water mains, and related facilities	108 509	88 277	8 454	11 778	9	10	10	20
Sewers, sewer lines, septic systems, and related facilities	55 772	45 550	3 674	6 547	12	13	14	29
Water mains and related facilities	52 737	42 727	4 780	5 231	9	9	11	23
Pipeline construction other than sewer or water lines	38 523	28 442	4 973	5 108	5	6	13	10
Blast furnaces, petroleum refineries, chemical complexes, etc.	46 024	18 036	14 853	13 134	6	7	7	12
Sewage treatment and water treatment plants	63 027	51 759	10 354	913	1	1	(Z)	7
Sewage treatment plants	43 435	(D)	(D)	(D)	1	(D)	(D)	(D)
Water treatment plants	19 591	(D)	(D)	(D)	2	(D)	(D)	(D)
Other nonbuilding construction	101 712	74 605	10 641	16 465	7	8	14	14
Construction work, n.s.k.	92 907	(NA)	(NA)	(NA)	8	(NA)	(NA)	(NA)
1987								
Value of construction work	2 698 609	1 806 139	526 667	231 373	2	2	4	3
Building construction	1 894 356	1 330 611	413 049	137 175	2	3	4	4
Single-family houses	476 016	360 174	72 502	43 338	7	8	8	9
Single-family houses, detached	421 652	325 235	61 871	34 545	7	9	8	9
Single-family houses, attached, including townhouses and townhouse-type condominiums	54 364	34 939	10 631	8 793	11	15	22	25
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	84 080	61 249	15 677	7 153	10	12	17	13
Other residential buildings, including hotels, motels, and tourist cabins	60 373	40 684	12 451	7 237	11	15	9	18
Office buildings	236 042	168 074	51 349	16 617	6	8	11	7
Other commercial buildings such as stores, restaurants, and automobile service stations	285 152	208 119	56 810	20 222	5	7	4	11
Industrial buildings and warehouses	293 832	200 262	68 664	24 905	4	5	8	7
Industrial buildings	235 574	163 347	54 410	17 816	4	5	8	9
Warehouses	58 258	36 915	14 254	7 089	11	16	18	8
Religious buildings	137 896	94 118	38 748	5 030	7	7	16	12
Educational buildings	115 495	69 074	41 678	4 743	9	9	15	4
Hospitals and institutional buildings	124 899	90 002	29 990	4 906	3	1	13	6
Amusement, social, and recreational buildings, indoors	8 295	4 892	2 501	901	12	14	22	19
Other nonresidential buildings	72 271	47 090	22 686	2 493	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	668 176	462 394	113 605	92 176	2	2	6	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	213 834	127 249	52 796	33 788	3	4	3	4
Private driveways and parking areas	25 645	16 896	5 691	3 058	15	15	29	24
Bridges, tunnels, and elevated highways	18 066	13 957	*2 115	1 993	6	2	46	9
Conservation and development construction	51 989	43 139	*3 959	4 890	6	3	61	7
Power and communication transmission lines, towers, and related facilities	42 625	35 833	2 577	4 214	10	12	8	30
Sewers, water mains, and related facilities	97 785	77 726	14 467	5 591	8	8	33	25
Sewers, sewer lines, septic systems, and related facilities	49 347	41 206	6 480	1 659	10	11	38	18
Water mains and related facilities	48 438	36 520	7 987	3 931	8	7	28	34
Pipeline construction other than sewer or water lines	24 559	17 439	1 688	5 431	2	2	15	1
Blast furnaces, petroleum refineries, chemical complexes, etc.	43 780	28 212	3 200	12 368	2	1	1	7
Sewage treatment and water treatment plants	45 666	38 895	5 212	1 558	4	4	21	26
Sewage treatment plants	42 606	36 291	5 189	1 124	4	3	21	32
Water treatment plants	3 060	2 604	(S)	*433	22	19	(S)	41
Other nonbuilding construction	104 227	63 047	21 922	19 391	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	136 076	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. **Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	4 366	27 708	24 305	28 258	30 324	27 945	1	1	1	2	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	850	2 869	2 512	2 884	3 176	2 906	4	7	8	7	7	7
1522	Other residential buildings -----	43	150	154	133	177	135	31	29	32	26	32	25
1531	Operative builders -----	104	393	333	377	446	417	16	15	16	15	16	14
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	57	606	556	591	675	603	24	13	11	9	15	14
1542	Nonresidential buildings, n.e.c. ----	218	2 830	2 556	2 779	3 027	2 956	10	4	4	4	4	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	75	2 058	1 464	2 299	2 581	1 888	9	4	5	5	5	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	*9	117	103	108	120	138	51	19	17	16	15	19
1623	Water, sewer, and utility lines -----	81	1 220	920	1 206	1 413	1 343	14	7	7	6	7	8
1629	Heavy construction, n.e.c. -----	140	1 469	1 216	1 705	1 523	1 430	13	8	6	13	8	8
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	575	3 485	3 242	3 478	3 764	3 458	3	3	3	3	4	3
1721	Painting and paper hanging -----	234	918	791	989	1 002	889	7	11	13	14	12	11
1731	Electrical work -----	354	2 601	2 458	2 592	2 667	2 688	4	4	4	4	5	5
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	210	1 013	880	1 028	1 093	1 052	7	8	9	10	9	11
1742	Plastering, drywall, and insulation work -----	216	1 952	1 846	1 925	1 994	2 044	8	7	7	7	7	7
1743	Terrazzo, tile, marble, and mosaic work -----	70	336	328	328	349	340	12	9	8	8	10	11
175	Carpentry and floor work:												
1751	Carpentry -----	255	697	626	735	758	671	7	8	9	9	8	9
1752	Floor laying and other floor work --	63	184	179	170	195	193	5	11	14	12	12	11
1761	Roofing, siding, and sheet metal work -----	191	1 421	1 212	1 401	1 574	1 497	8	9	9	9	9	11
1771	Concrete work -----	246	1 170	900	1 264	1 386	1 129	6	10	11	10	9	10
1781	Water well drilling -----	17	*66	*57	*63	*74	*70	19	52	49	44	55	58
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	51	460	448	458	526	406	18	12	11	11	16	11
1793	Glass and glazing work -----	18	66	64	69	68	61	8	10	12	12	10	9
1794	Excavation work -----	86	447	406	470	490	422	19	16	19	16	15	15
1795	Wrecking and demolition work -----	2	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	37	222	223	223	221	222	25	28	28	28	29	29
1799	Special trade contractors, n.e.c. ----	166	(D)	(D)	(D)	(D)	(D)	13	(D)	(D)	(D)	(D)	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Selected Industry Ratios for Establishments With Payroll in This State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.0	22.2	136.2	.205	.317	.287	.307	.017
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.3	16.3	144.7	.144	.333	.311	.035	.005
1522	Other residential buildings -----	4.9	15.9	114.7	.195	.361	.337	.046	.007
1531	Operative builders -----	5.9	22.1	471.1	.074	.315	.427	*.012	.006
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	13.3	26.9	186.9	.180	.282	.463	.054	.050
1542	Nonresidential buildings, n.e.c. -----	17.8	25.5	330.1	.106	.170	.613	.011	.007
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	33.4	26.7	145.4	.225	.396	.249	.204	.036
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	15.8	26.0	186.0	.164	.209	.508	.282	.024
1623	Water, sewer, and utility lines -----	18.9	23.8	107.7	.276	.390	.102	.140	.064
1629	Heavy construction, n.e.c. -----	12.6	26.7	130.7	.247	(D)	.171	(D)	.026
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	7.8	25.0	122.9	.262	.414	.138	.660	.014
1721	Painting and paper hanging -----	4.7	15.0	56.8	.317	.308	.025	.651	.009
1731	Electrical work -----	9.3	26.0	103.9	.316	.386	.035	.678	.014
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.4	18.1	(D)	(D)	(D)	(D)	(D)	(D)
1742	Plastering, drywall, and insulation work -----	10.4	18.4	66.0	.321	.433	(S)	.925	.013
1743	Terrazzo, tile, marble, and mosaic work -----	6.2	17.9	64.9	.351	.422	.017	.782	.012
175	Carpentry and floor work:								
1751	Carpentry -----	3.4	15.0	63.0	.295	(S)	.122	.586	.008
1752	Floor laying and other floor work -----	3.9	15.8	131.8	.157	.465	.131	.668	.018
1761	Roofing, siding, and sheet metal work -----	9.4	17.3	83.0	.262	.431	.038	.573	.009
1771	Concrete work -----	5.8	17.6	76.7	.279	.411	.045	.440	*.032
1781	Water well drilling -----	4.5	16.2	88.1	.210	.371	(S)	(S)	.014
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	11.1	33.8	124.3	.334	.362	.138	.912	.015
1793	Glass and glazing work -----	5.5	21.8	152.4	.214	.675	(D)	.800	.009
1794	Excavation work -----	6.2	20.2	92.6	.259	.183	.059	.882	.033
1795	Wrecking and demolition work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	7.9	22.5	118.1	.247	.419	.009	*.591	.029
1799	Special trade contractors, n.e.c. -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SALT LAKE CITY—OGDEN, UT MSA											
15,16, 17	Construction industries	2 707	23 990	560 317	2 772 085	1 898 262	1 105 519	857 348	873 823	55 833	2	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	2 037	33 900	220 517	160 465	95 389	71 168	60 052	2 602	10	11
1522	Other residential buildings	(S)	102	2 138	10 646	(D)	(D)	(D)	(D)	383	23	(D)
1531	Operative builders	71	331	8 598	117 095	66 113	26 020	(S)	50 982	(D)	22	19
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	43	536	15 417	85 268	43 694	20 926	22 805	41 574	3 362	15	12
1542	Nonresidential buildings, n.e.c.	145	3 379	89 229	841 590	313 990	195 391	131 163	527 600	5 437	4	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	35	1 189	34 796	180 093	125 434	73 785	70 677	54 659	8 618	5	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	*7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	40	857	21 990	73 068	67 097	42 816	26 697	5 970	6 803	8	6
1629	Heavy construction, n.e.c.	56	617	19 015	85 663	62 021	35 726	29 633	23 642	(S)	9	8
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	381	3 629	93 582	353 540	302 378	165 193	148 689	51 162	4 029	3	3
1721	Painting and paper hanging.....	(S)	792	12 077	37 757	36 869	26 077	12 247	889	868	18	17
1731	Electrical work	230	2 450	65 743	207 110	200 108	118 384	82 594	7 002	3 761	5	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work.....	124	693	12 549	36 240	35 803	23 267	12 542	(S)	836	12	11
1742	Plastering, drywall, and insulation work	144	1 560	29 988	90 528	83 453	42 813	40 989	(S)	1 065	8	7
1743	Terrazzo, tile, marble, and mosaic work	(S)	383	7 053	19 353	19 004	10 979	8 032	*350	163	7	8
175	Carpentry and floor work:											
1751	Carpentry	152	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floor work	43	194	3 237	20 433	17 554	8 226	9 409	*2 879	*269	14	26
1761	Roofing, siding, and sheet metal work	131	1 417	25 655	96 944	93 210	53 463	41 006	3 735	1 069	8	6
1771	Concrete work	164	1 023	19 151	68 450	65 368	38 154	27 665	3 082	1 646	13	13
1781	Water well drilling	11	*64	(D)	*4 963	(D)	*3 073	*1 832	(D)	1 805	58	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	36	469	16 516	50 331	42 541	23 639	18 937	7 790	1 738	14	9
1793	Glass and glazing work	11	65	1 575	(D)	(D)	2 924	4 865	(D)	137	16	(D)
1794	Excavation work.....	(S)	310	6 241	21 368	20 458	15 727	4 800	911	(S)	22	23
1795	Wrecking and demolition work	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -	36	(D)	(D)	(D)	(D)	(D)	(D)	229	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	112	1 000	23 080	69 188	64 708	43 512	22 512	4 480	2 816	13	12

Contents

Wyoming

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-- Not applicable for this report.

Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Wyoming. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 4,533 establishments in this State operating in the construction industries. These establishments accounted for \$1.0 billion in total dollar value of business done.

Most of the 4,533 construction establishments were small. Of the total, 2,841 were nonemployers, and over half of the employer establishments had less than 5 employees. The 533 construction establishments with 5 employees or more, while representing only 12 percent of all establishments, accounted for more than 75 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$942 million in total dollar value of business done. Of this amount, \$916 million were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$173 million, leaving net value of construction work of \$743 million. In addition, these establishments paid out \$373 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$450 million. (See Introduction and appendixes for explanation of terms.)

There were 1,692 establishments with total employment averaging 10,948 during the year. Total payroll for 1992 was \$235 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 2,841 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$59 million. Most of these establishments, about 80 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992
1987

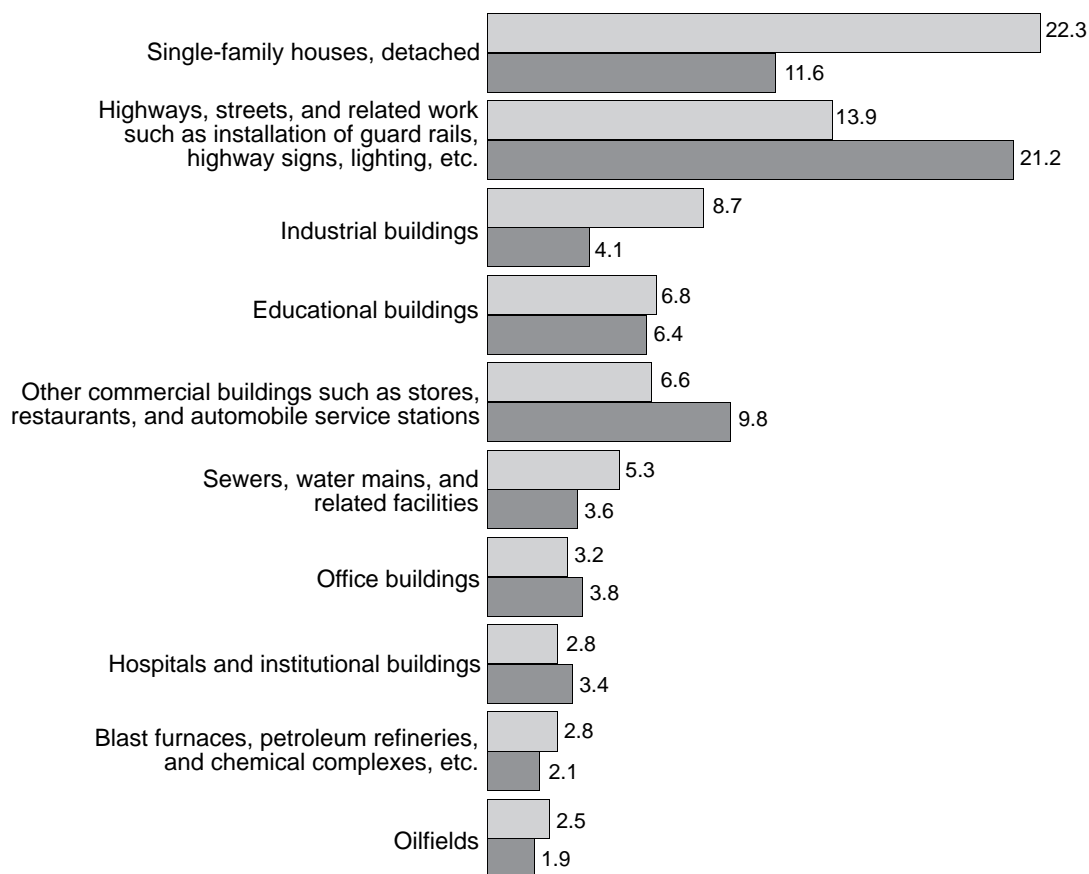


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992
1987

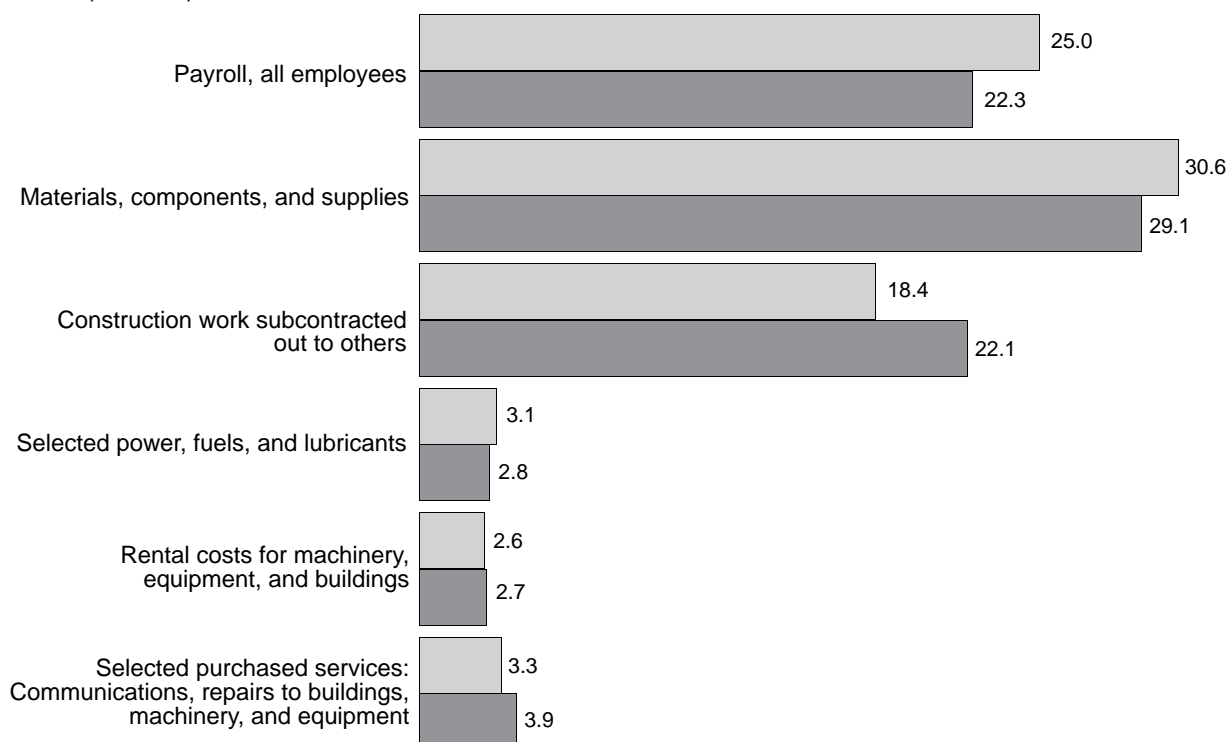


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done ¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	4 533	3 843	10 948	1 000 886	2 841	2 816	59 180	1 692	1 027	10 948	941 706	2	2
15	Building construction—General contractors and operative builders ----	935	717	2 709	318 275	420	409	15 089	515	(S)	2 709	303 186	5	5
16	Heavy construction other than building construction— contractors-----	364	222	3 333	312 362	142	133	3 284	222	89	3 333	309 078	4	3
17	Special trade contractors -----	3 234	2 904	4 907	370 249	2 279	2 274	40 807	955	630	4 907	329 442	3	3
1711	Plumbing, heating, and air-conditioning --	321	251	877	87 945	129	128	4 685	192	123	877	83 260	7	9
1731	Electrical work-----	282	181	1 154	92 508	114	111	3 452	168	70	1 154	89 056	4	5
	1987													
15, 16, 17	Construction industries ² -----	4 716	3 775	8 952	854 485	3 410	3 396	100 937	1 306	379	8 952	753 548	2	2
15	Building construction—General contractors and operative builders ----	1 037	798	1 836	251 476	709	678	28 115	328	120	1 836	223 361	6	7
16	Heavy construction other than building construction— contractors-----	377	194	(D)	(D)	140	143	7 671	237	51	(D)	(D)	(D)	(D)
17	Special trade contractors -----	3 175	2 667	(D)	(D)	2 444	2 462	57 661	731	205	(D)	(D)	(D)	(D)
1711	Plumbing, heating, and air-conditioning --	317	207	761	59 715	166	167	6 023	151	40	761	53 692	10	13
1731	Electrical work-----	295	182	969	65 345	157	156	7 250	138	26	969	58 095	8	8

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	1 692	10 948	9 012	235 264	183 942	915 974	742 521	450 239
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	377	1 525	1 245	25 914	21 380	137 324	100 651	47 837
1522	Other residential buildings -----	*13	*67	*58	*1 525	*1 131	*6 148	*3 350	*2 643
1531	Operative builders -----	18	(S)	(S)	(S)	(S)	*5 889	(S)	(S)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	22	461	386	15 304	12 681	51 192	35 032	25 767
1542	Nonresidential buildings, n.e.c. -----	85	628	484	12 558	9 040	96 251	41 346	23 775
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	66	1 222	1 041	31 392	24 533	131 040	109 695	65 992
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	*8	211	172	4 421	3 174	20 359	15 302	8 841
1623	Water, sewer, and utility lines -----	37	860	716	19 039	14 578	68 232	62 909	37 572
1629	Heavy construction, n.e.c. -----	111	1 039	865	29 950	22 047	83 579	74 709	54 892
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	192	877	662	20 037	15 138	80 693	72 736	40 638
1721	Painting and paper hanging -----	79	290	254	(D)	3 509	10 992	(D)	8 775
1731	Electrical work -----	168	1 154	891	29 007	22 406	84 949	81 987	51 170
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	50	228	198	3 169	2 745	11 621	11 263	8 060
1742	Plastering, drywall, and insulation work -----	55	305	245	6 163	4 848	18 323	18 068	12 210
1743	Terrazzo, tile, marble, and mosaic work -----	*17	29	22	503	343	1 845	1 804	1 077
175	Carpentry and floor work:								
1751	Carpentry -----	74	174	158	2 683	2 462	8 910	8 243	5 759
1752	Floor laying and other floor work -----	17	37	32	409	328	1 507	1 442	(D)
1761	Roofing, siding, and sheet metal work -----	53	458	395	6 833	5 213	23 778	22 415	10 426
1771	Concrete work -----	73	412	367	7 290	6 404	(D)	(D)	(D)
1781	Water well drilling -----	20	74	57	(D)	1 065	(D)	4 959	3 002
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	6	41	(D)	(D)	(D)	(D)	(D)	(D)
1793	Glass and glazing work -----	3	(D)	(D)	412	(D)	(D)	(D)	1 060
1794	Excavation work -----	42	148	*129	*2 516	*2 283	10 127	9 293	6 878
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	*9	(D)	40	(D)	1 499	3 916	3 916	2 545
1799	Special trade contractors, n.e.c. -----	97	610	528	7 671	5 984	23 195	20 245	14 177

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
318 013	173 454	193 974	24 341	30 970	255 917	8 952	731 687	344 334	2	2	10	15, 16, 17
												15
54 681 767	36 674 (S)	4 901 —	(S) *32	1 599 —	12 703 (S)	(S) *107	(S) 10 690	(S) 4 076	8 68	11 55	26 —	152 1521 1522
*1 952	*2 253	(S)	(S)	*97	294	(S)	(S)	(S)	(S)	(S)	62	1531
9 536 21 756	16 159 54 905	3 665 (S)	2 245 *1 192	560 *914	5 508 11 160	153 1 057	20 108 134 633	5 795 30 947	10 13	6 11	22 45	154 1541 1542
												16
45 628	21 346	15 969	5 738	7 477	81 885	1 768	168 028	86 992	8	4	18	1611
7 087 27 573 20 897	5 057 5 322 8 870	3 537 11 497 7 556	506 3 198 4 902	1 109 6 069 4 840	*9 848 30 813 40 712	(D) 528 915	(D) 57 373 77 565	(D) 35 387 40 882	22 11 7	19 8 9	39 39 26	162 1622 1623 1629
												17
34 665	7 957	29 471	1 228	2 382	14 527	761	50 939	27 566	7	9	20	1711
(D)	(D)	6 448	85	254	2 358	119	5 452	4 831	14	(D)	36	1721
34 923	2 962	40 180	1 492	2 216	13 509	969	56 090	33 298	4	5	18	1731
3 203 5 936 767	358 256 *41	8 202 10 332 *1 761	108 413 *32	(D) 281 51	*3 303 2 100 345	137 232 (D)	5 124 8 054 840	2 736 5 360 420	12 15 27	13 16 29	(D) 32 30	174 1741 1742 1743
(S) 839	(S) 64	4 730 886	40 36	276 61	2 195 304	(S) (D)	(S) (D)	(S) (D)	15 5	14 6	18 5	175 1751 1752
12 086	1 363	12 640	275	512	(D)	417	21 284	11 041	17	9	23	1761
12 198	(D)	11 969	313	(D)	3 705	224	12 062	7 794	7	(D)	(D)	1771
(D)	(D)	246	55	*188	(S)	74	4 247	2 102	11	9	43	1781
1 506 (D) *2 427 — 1 371 9 288	(D) (D) *834 — — 2 950	(D) (D) 4 373 — (D) 7 369	(D) (D) *218 — (D) 1 217	(D) (D) *386 64 850	496 716 *3 506 — (D) 6 938	92 57 (S) — (D) 359	6 706 (D) (S) — (S) 13 422	4 341 2 014 (S) — (S) 8 403	(Z) (D) 38 — (D) 11	(D) (D) 38 — (D) 18	(D) (D) 51 — 34 26	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	1 692	1 306	1 819	1 759	1	3	4	5
Proprietors and working partners.....	1 027	379	665	1 111	4	12	8	9
All employees**	10 948	8 952	14 851	13 175	2	2	2	3
Construction workers:								
March.....	7 625	5 659	11 675	9 559	2	3	2	3
May	9 072	7 452	12 630	12 024	2	3	2	3
August	10 288	8 574	13 447	13 472	2	2	2	3
November.....	9 065	7 158	11 509	11 617	2	3	2	3
Average	9 012	7 211	12 521	11 678	2	2	2	3
Other employees:								
March.....	1 863	1 680	2 316	1 370	3	4	4	5
May	1 910	1 664	(NA)	(NA)	3	4	(NA)	(NA)
August	2 002	1 882	(NA)	(NA)	4	5	(NA)	(NA)
November.....	1 969	1 736	(NA)	(NA)	4	4	(NA)	(NA)
Average	1 936	1 740	(NA)	(NA)	3	4	(NA)	(NA)
Payroll, all employees	235 264	168 001	253 400	151 945	1	2	2	2
Payroll, construction workers	183 942	128 734	204 582	130 005	2	2	2	2
Payroll, other employees	51 322	39 266	48 817	21 940	2	3	3	3
First quarter payroll, all employees	49 950	32 633	58 619	30 447	2	3	2	2
Fringe benefits, all employees	48 736	32 484	44 321	22 597	3	3	2	2
Legally required expenditures.....	37 594	23 043	34 614	14 818	3	3	2	2
Voluntary expenditures.....	11 143	9 441	9 706	7 779	5	5	3	1
Dollar value of business done	941 706	753 548	1 081 190	650 014	2	2	2	2
Value of construction work	915 974	731 687	1 038 734	630 497	2	2	2	2
Value of construction work subcontracted in from others	193 974	140 105	194 816	130 120	6	6	5	4
Other business receipts	25 732	20 071	36 800	19 517	9	7	5	8
Net value of construction†	742 521	565 131	808 260	519 838	2	2	2	2
Value added††	450 239	344 334	511 670	314 891	2	2	2	2
Selected costs	491 466	407 424	563 864	328 368	3	3	3	3
Materials, components, and supplies	288 547	219 594	300 384	194 023	4	4	2	3
Construction work subcontracted out to others	173 454	166 556	230 474	110 658	6	4	3	4
Selected power, fuels, and lubricants	29 465	21 274	33 006	23 686	3	2	3	2
Electricity.....	2 736	1 714	2 447	1 014	9	4	4	6
Natural gas	2 612	733	1 219	646	3	9	4	9
Gasoline and diesel fuel	22 019	17 049	27 115	18 700	3	2	3	2
On highway use.....	12 844	9 010	(NA)	(NA)	4	3	(NA)	(NA)
Off highway use.....	9 175	8 039	(NA)	(NA)	4	4	(NA)	(NA)
Other, including lubricating oils and greases.....	2 098	1 776	2 224	3 334	6	6	3	3
Rental cost for machinery, equipment, and buildings	24 341	20 390	24 840	10 805	5	4	3	4
For machinery and equipment	18 997	16 731	20 871	9 347	5	4	3	4
For buildings.....	5 344	3 658	3 969	1 458	12	8	6	6
Selected purchased services	30 724	29 594	27 595	30 324	4	3	3	2
Communication services	5 707	3 238	4 522	2 550	5	5	4	4
Repairs to buildings and other structures	1 395	708	730	841	10	18	6	12
Repairs to machinery and equipment	23 622	25 647	22 343	26 932	4	3	3	2
Ownership of construction projects:								
Value of construction work	915 974	731 687	1 038 734	630 497	2	2	2	2
Government owned	327 774	349 603	331 958	144 494	6	5	4	2
Federal	71 599	152 031	(NA)	(NA)	9	10	(NA)	(NA)
State and local	256 175	197 571	(NA)	(NA)	7	3	(NA)	(NA)
Privately owned	588 200	382 084	706 776	486 003	4	4	3	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	258 436	224 604	6	5
Capital expenditures, other than land -----	30 970	16 236	10	7
New -----	18 655	10 563	16	8
Used -----	12 315	5 673	9	13
Retirements and disposition of depreciable assets -----	(S)	9 188	(S)	15
End-of-year gross book value of depreciable assets -----	255 917	231 653	6	5
Depreciation charges during year -----	27 332	24 361	6	6
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	(S)	30 094	(S)	14
Capital expenditures, other than land -----	1 440	1 709	20	38
New buildings and other structures -----	1 100	401	25	25
Used buildings and other structures -----	339	*1 307	13	48
Retirements and disposition of depreciable assets -----	(S)	232	(S)	27
End-of-year gross book value of depreciable assets -----	25 280	31 570	12	14
Depreciation charges during year -----	(S)	2 638	(S)	21
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	215 127	194 510	6	5
Capital expenditures, other than land -----	29 530	14 527	10	6
New machinery and equipment, including automobiles and trucks -----	17 555	10 161	17	8
New automobiles and trucks, intended primarily for highway use -----	6 141	4 613	14	12
Used machinery and equipment, including automobiles and trucks -----	11 976	4 365	9	8
Retirements and disposition of depreciable assets -----	14 020	8 956	8	15
End-of-year gross book value of depreciable assets -----	230 637	200 082	6	5
Depreciation charges during year -----	24 217	21 723	6	6

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	1 692	1
Value of construction work	915 974	2
Establishments with inventories:		
Number	554	5
Value of construction work	413 149	3
Inventories ¹ :		
End of 1992, materials and supplies	12 910	14
End of 1991, materials and supplies	12 349	15
Establishments with no inventories:		
Number	618	6
Value of construction work	318 103	6
Establishments not reporting:		
Number	520	5
Value of construction work	184 722	6

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments	1 692	1 158	270	157	82	16	6	2	—	—
All employees**	10 948	2 364	1 742	2 057	2 276	1 080	1 431	(D)	—	—
Payroll, all employees	235 264	37 057	28 972	43 810	55 481	31 469	38 476	(D)	—	—
Dollar value of business done	941 706	192 179	137 280	176 539	203 666	114 363	117 680	(D)	—	—
Value of construction work	915 974	189 172	132 078	172 519	193 720	111 169	117 317	(D)	—	—
Net value of construction work†	742 521	155 087	107 418	137 762	154 949	86 957	100 346	(D)	—	—
Value added††	450 239	87 989	62 075	86 150	97 001	51 176	65 848	(D)	—	—
Cost of materials, components, supplies, and fuels	318 013	70 105	50 545	55 633	67 894	38 975	34 861	(D)	—	—
Cost of construction work subcontracted out to others	173 454	34 084	(S)	34 756	38 770	24 212	16 971	(D)	—	—
Rental cost for machinery, equipment, and buildings	24 341	(S)	2 105	4 227	6 690	4 202	4 501	(D)	—	—
Capital expenditures, other than land	30 970	4 969	3 356	5 486	10 825	2 795	3 540	(D)	—	—
End-of-year gross book value of depreciable assets	255 917	36 613	32 831	56 898	63 569	28 388	37 618	(D)	—	—
1987										
All employees**	8 952	(S)	1 481	1 746	1 887	1 403	857	—	—	—
Value of construction work	731 687	(S)	82 957	144 370	192 462	208 892	(D)	—	—	—
Value added††	344 334	(S)	46 089	63 923	92 899	49 050	43 293	—	—	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees**	2	7	12	10	6	(Z)	(Z)	(D)	—	—
Net value of construction work†	2	9	13	9	4	(Z)	(Z)	(D)	—	—
Capital expenditures, other than land	10	21	17	14	23	(Z)	(Z)	(D)	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments	1 692	(S)	(S)	(S)	533	287	197	115	45	15	9
All employees**	10 948	(S)	(S)	410	1 511	1 602	1 627	1 919	1 467	1 003	1 221
Payroll, all employees	235 264	(S)	(S)	4 805	22 050	25 743	32 132	44 779	41 102	25 518	37 721
Dollar value of business done	941 706	(S)	(S)	(S)	87 337	101 919	135 074	184 514	155 868	101 869	150 549
Value of construction work	915 974	(S)	(S)	(S)	85 028	100 036	132 568	177 852	147 482	100 074	148 523
Net value of construction work†	742 521	(S)	(S)	17 345	74 756	88 075	111 392	147 180	121 186	68 551	108 861
Value added††	450 239	(S)	(S)	10 551	44 123	53 162	70 791	87 338	72 539	44 118	64 617
Cost of materials, components, supplies, and fuels	318 013	(S)	(S)	(S)	32 942	36 795	43 107	66 504	57 032	26 228	46 270
Cost of construction work subcontracted out to others	173 454	(S)	(S)	(S)	(S)	(S)	21 176	30 672	26 296	31 523	39 662
Rental cost for machinery, equipment, and buildings	24 341	(S)	(S)	(S)	1 297	1 411	2 284	6 683	3 481	4 245	4 475
Capital expenditures, other than land	30 970	(S)	(S)	684	3 226	2 474	3 575	8 360	6 217	2 107	4 248
End-of-year gross book value of depreciable assets	255 917	(S)	(S)	3 640	18 501	27 726	45 292	49 624	39 199	28 126	42 840
1987											
All employees**	8 952	(S)	(S)	(S)	1 029	1 119	1 103	1 687	1 347	901	928
Value of construction work	731 687	(S)	(S)	(S)	50 940	69 987	72 914	132 214	103 371	123 525	149 588
Value added††	344 334	(S)	(S)	(S)	28 430	36 351	38 337	67 650	52 065	43 108	61 772
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	2	(S)	(S)	13	10	13	10	9	2	2	(Z)
Net value of construction work†	2	(S)	(S)	12	10	13	11	10	3	2	(Z)
Capital expenditures, other than land	10	(S)	(S)	32	30	21	19	30	3	7	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair	A	B	C	D
	A	B	C	D	A	B	C	D
1992								
Value of construction work	915 974	516 742	235 719	114 427	2	4	3	5
Building construction	518 981	343 848	119 224	55 910	4	5	4	9
Single-family houses	216 529	152 675	41 528	22 326	7	9	8	15
Single-family houses, detached	204 130	145 398	38 296	20 436	7	9	8	15
Single-family houses, attached, including townhouses and townhouse-type condominiums	12 399	7 277	*3 232	1 891	22	20	46	21
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	10 284	5 763	2 437	2 084	25	33	36	17
Other residential buildings, including hotels, motels, and tourist cabins	7 912	4 522	2 449	941	17	23	16	19
Office buildings	29 379	10 804	(S)	6 062	12	14	(S)	18
Other commercial buildings such as stores, restaurants, and automobile service stations	60 038	37 809	15 162	7 067	8	10	12	17
Industrial buildings and warehouses	89 265	66 001	13 634	9 630	7	8	6	18
Industrial buildings	79 446	58 203	11 956	9 287	8	8	7	19
Warehouses	9 819	7 798	(S)	343	28	35	(S)	34
Religious buildings	5 969	1 827	2 879	1 263	10	4	13	23
Educational buildings	62 410	46 772	11 600	4 038	19	24	12	19
Hospitals and institutional buildings	25 844	10 733	13 864	1 247	13	30	7	34
Other nonresidential buildings	11 351	6 940	3 158	1 253	12	16	21	21
Nonbuilding construction	347 907	172 895	116 495	58 517	3	5	3	6
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	127 443	35 165	72 856	19 422	4	7	3	9
Airport runways and related work	7 406	(D)	1 923	(D)	5	(D)	(Z)	(D)
Private driveways and parking areas	6 623	(D)	2 227	(D)	9	(D)	6	(D)
Recreational facilities	(S)	1 416	(S)	—	(S)	39	(S)	—
Bridges, tunnels, and elevated highways	20 127	(D)	(D)	—	22	(D)	(D)	—
Conservation and development construction	20 270	12 198	*2 923	*5 148	19	20	48	48
Power and communication transmission lines, towers, and related facilities	19 818	16 094	(D)	(D)	7	9	(D)	(D)
Sewers, water mains, and related facilities	48 117	35 059	8 577	4 481	11	13	9	23
Sewers, sewer lines, septic systems, and related facilities	16 651	11 397	3 490	1 764	13	12	19	28
Water mains and related facilities	31 466	23 662	5 087	2 718	13	15	7	33
Pipeline construction other than sewer or water lines	20 778	14 532	2 057	4 188	19	26	10	21
Blast furnaces, petroleum refineries, chemical complexes, etc.	25 522	8 779	7 303	9 439	6	2	2	13
Oilfields	23 305	10 951	(D)	(D)	7	12	(D)	(D)
Other nonbuilding construction	23 430	16 085	2 912	4 433	17	15	38	25
Construction work, n.s.k.	49 086	(NA)	(NA)	(NA)	11	(NA)	(NA)	(NA)
1987								
Value of construction work	731 687	400 840	209 808	83 284	2	4	3	5
Building construction	347 376	217 197	81 255	47 178	4	6	7	10
Single-family houses	91 696	64 379	17 048	10 267	14	18	17	14
Single-family houses, detached	84 801	60 495	15 224	9 081	15	20	18	14
Single-family houses, attached, including townhouses and townhouse-type condominiums	6 895	3 884	*1 824	1 186	20	15	47	29
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	6 209	2 460	1 572	2 176	10	23	6	12
Other residential buildings, including hotels, motels, and tourist cabins	12 366	3 934	*3 871	4 561	20	20	51	24
Office buildings	27 780	14 667	9 096	4 016	14	12	35	8
Other commercial buildings such as stores, restaurants, and automobile service stations	71 595	52 096	12 596	6 902	6	6	15	17
Industrial buildings and warehouses	34 562	21 637	7 537	5 386	7	10	13	4
Industrial buildings	29 830	19 036	5 900	4 893	7	11	12	3
Warehouses	4 732	2 601	*1 637	493	30	27	43	16
Religious buildings	9 736	6 964	1 356	1 415	11	14	6	30
Educational buildings	46 632	28 280	14 823	3 528	4	6	4	22
Hospitals and institutional buildings	24 561	11 051	8 581	4 929	17	23	17	38
Other nonresidential buildings	18 965	11 459	4 770	3 119	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	346 557	181 943	128 553	36 060	2	4	2	6
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	155 194	47 901	98 001	9 292	2	4	1	8
Private driveways and parking areas	6 473	4 379	781	1 311	19	19	20	26
Bridges, tunnels, and elevated highways	9 227	1 691	5 703	1 832	5	1	(Z)	27
Conservation and development construction	15 207	10 755	3 228	1 223	28	38	27	10
Power and communication transmission lines, towers, and related facilities	32 631	24 010	7 227	1 394	9	2	27	20
Sewers, water mains, and related facilities	26 544	21 928	1 928	2 687	7	7	6	28
Sewers, sewer lines, septic systems, and related facilities	13 965	10 960	995	2 010	8	6	12	33
Water mains and related facilities	12 579	10 968	933	*677	12	12	(Z)	42
Pipeline construction other than sewer or water lines	5 431	4 283	*444	702	16	12	41	23
Blast furnaces, petroleum refineries, chemical complexes, etc.	15 533	8 010	1 333	6 190	5	(Z)	3	12
Oilfields	13 946	9 582	2 387	1 975	9	10	8	8
Other nonbuilding construction	66 371	49 404	9 878	18 279	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	37 753	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	1 692	9 012	7 625	9 072	10 288	9 065	1	2	2	2	2	2
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	377	1 245	1 015	1 280	1 396	1 290	6	9	9	9	9	9
1522	Other residential buildings -----	*13	*58	(S)	*49	*94	*40	52	69	(S)	73	65	65
1531	Operative builders -----	18	(S)	(S)	(S)	(S)	(S)	30	(S)	(S)	(S)	(S)	(S)
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	22	386	506	335	466	238	29	8	10	5	16	7
1542	Nonresidential buildings, n.e.c. -----	85	484	399	504	501	533	19	12	12	13	12	15
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	66	1 041	689	1 178	1 415	883	20	7	5	6	9	7
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	*8	172	98	169	264	159	50	25	27	16	31	23
1623	Water, sewer, and utility lines -----	37	716	598	660	758	848	23	12	14	10	11	12
1629	Heavy construction, n.e.c. -----	111	865	747	843	943	927	15	7	6	7	9	6
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	192	662	610	627	699	711	6	7	8	7	7	9
1721	Painting and paper hanging -----	79	254	166	274	318	256	6	14	12	14	17	17
1731	Electrical work -----	168	891	870	847	898	948	2	4	4	4	5	6
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	50	198	184	176	(S)	213	8	12	14	10	(S)	18
1742	Plastering, drywall, and insulation work -----	55	245	180	264	221	315	21	15	9	18	22	12
1743	Terrazzo, tile, marble, and mosaic work -----	*17	22	*26	*30	17	13	46	36	58	51	14	(Z)
175	Carpentry and floor work:												
1751	Carpentry -----	74	158	156	172	175	129	11	16	17	15	15	17
1752	Floor laying and other floor work -----	17	32	24	31	40	34	11	6	6	4	5	4
1761	Roofing, siding, and sheet metal work -----	53	395	323	357	485	415	10	19	17	18	22	16
1771	Concrete work -----	73	367	271	409	420	365	9	7	8	7	7	6
1781	Water well drilling -----	20	57	53	61	62	53	11	12	12	14	10	12
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	6	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1793	Glass and glazing work -----	3	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work -----	42	*129	80	*142	*149	*147	27	41	37	44	43	41
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	*9	40	37	39	46	37	61	26	30	28	24	15
1799	Special trade contractors, n.e.c. -----	97	528	481	556	629	447	18	12	11	12	14	11

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	6.5	21.5	101.6	.257	.347	.189	.212	.027
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.0	17.0	110.3	.189	.398	.267	.036	(S)
1522	Other residential buildings -----	*5.0	22.8	*106.0	*.248	*.125	*.455	—	.005
1531	Operative builders -----	(S)	(S)	(S)	(S)	.331	.383	(S)	(S)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	21.2	33.2	132.6	.299	.186	.316	.072	.044
1542	Nonresidential buildings, n.e.c. -----	7.4	20.0	198.9	.130	.226	.570	(S)	.012
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	18.4	25.7	125.9	.240	.348	.163	.122	.044
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	27.8	21.0	118.4	.217	.348	.248	.174	.025
1623	Water, sewer, and utility lines -----	23.0	22.1	95.3	.279	.404	.078	.169	.047
1629	Heavy construction, n.e.c. -----	9.4	28.8	96.6	.358	.250	.106	.090	.059
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	4.6	22.8	121.9	.248	.430	.099	.365	.015
1721	Painting and paper hanging -----	3.7	(D)	43.3	(D)	(D)	(D)	.587	.008
1731	Electrical work -----	6.9	25.1	95.3	.341	.411	.035	.473	.018
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	4.6	13.9	58.7	.273	.276	.031	.706	.009
1742	Plastering, drywall, and insulation work -----	5.5	20.2	74.8	.336	.324	.014	.564	.023
1743	Terrazzo, tile, marble, and mosaic work -----	1.7	17.3	83.9	.273	.416	*.022	.954	.017
175	Carpentry and floor work:								
1751	Carpentry -----	2.4	15.4	56.4	.301	(S)	(S)	.531	.005
1752	Floor laying and other floor work -----	2.2	11.1	47.1	.271	.557	.043	.588	.024
1761	Roofing, siding, and sheet metal work -----	8.7	14.9	60.2	.287	.508	.057	.532	.012
1771	Concrete work -----	5.6	17.7	(D)	(D)	(D)	(D)	(D)	(D)
1781	Water well drilling -----	3.7	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	6.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1793	Glass and glazing work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work -----	3.5	17.0	78.5	.248	.240	*.082	.432	.022
1795	Wrecking and demolition work -----	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. -----	(D)	(D)	97.9	(D)	.350	—	(D)	(D)
1799	Special trade contractors, n.e.c. -----	6.3	12.6	43.9	.331	.400	.127	.318	.052

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Not applicable]

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
- **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
- **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- **Outdoor swimming pools.** Includes wading pools and reflecting pools.
- **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
- **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
- **Fencing.** Includes all types of fencing.
- **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
- **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
- **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- **Harbor and port facilities.** Includes docks, piers, and wharves.
- **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
- **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
- **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
- **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
- **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

Nonbuilding construction:

- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C.

Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
 Maine
 Massachusetts
 New Hampshire
 Rhode Island
 Vermont

MIDDLE ATLANTIC STATES

New Jersey
 New York
 Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
 Indiana
 Michigan
 Ohio
 Wisconsin

WEST NORTH CENTRAL STATES

Iowa
 Kansas
 Minnesota
 Missouri
 Nebraska
 North Dakota
 South Dakota

SOUTH ATLANTIC STATES

Delaware
 District of Columbia
 Florida
 Georgia
 Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
 South Carolina
 Virginia
 West Virginia

EAST SOUTH CENTRAL STATES

Alabama
 Kentucky
 Mississippi
 Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
 Louisiana
 Oklahoma
 Texas

MOUNTAIN STATES

Arizona
 Colorado
 Idaho
 Montana
 Nevada
 New Mexico
 Utah
 Wyoming

PACIFIC STATES

Alaska
 California
 Hawaii
 Oregon
 Washington

Appendix D.

Metropolitan Areas

[Titles and definitions shown for MSA's, CMSA's, and PMSA's are those established by the Office of Management and Budget as of June 30, 1993]

Abilene, TX MSA

Taylor County, TX

Akron, OH PMSA—see Cleveland–Akron, OH CMSA

Albany, GA MSA

Dougherty County, GA
Lee County, GA

Albany–Schenectady–Troy, NY MSA

Albany County, NY
Montgomery County, NY
Rensselaer County, NY
Saratoga County, NY
Schenectady County, NY
Schoharie County, NY

Albuquerque, NM MSA

Bernalillo County, NM
Sandoval County, NM
Valencia County, NM

Alexandria, LA MSA

Rapides Parish, LA

Allentown–Bethlehem–Easton, PA MSA

Carbon County, PA
Lehigh County, PA
Northampton County, PA

Altoona, PA MSA

Blair County, PA

Amarillo, TX MSA

Potter County, TX
Randall County, TX

Anchorage, AK MSA

Anchorage Borough, AK

Ann Arbor, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Anniston, AL MSA

Calhoun County, AL

Appleton–Oshkosh–Neenah, WI MSA

Calumet County, WI
Outagamie County, WI
Winnebago County, WI

Asheville, NC MSA

Buncombe County, NC
Madison County, NC

Athens, GA MSA

Clarke County, GA
Madison County, GA
Oconee County, GA

Atlanta, GA MSA

Barrow County, GA
Bartow County, GA

Atlanta, GA MSA—Con.

Carroll County, GA
Cherokee County, GA
Clayton County, GA
Cobb County, GA
Coweta County, GA
DeKalb County, GA
Douglas County, GA
Fayette County, GA
Forsyth County, GA
Fulton County, GA
Gwinnett County, GA
Henry County, GA
Newton County, GA
Paulding County, GA
Pickens County, GA
Rockdale County, GA
Spalding County, GA
Walton County, GA

Atlantic–Cape May, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Augusta–Aiken, GA–SC MSA

Columbia County, GA
McDuffie County, GA
Richmond County, GA
Aiken County, SC
Edgefield County, SC

Austin–San Marcos, TX MSA

Bastrop County, TX
Caldwell County, TX
Hays County, TX
Travis County, TX
Williamson County, TX

Bakersfield, CA MSA

Kern County, CA

Baltimore, MD PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA

Bangor, ME MSA

Penobscot County, ME (part)
Bangor city, ME
Brewer city, ME
Eddington town, ME
Glenburn town, ME
Hampden town, ME
Hermon town, ME
Holden town, ME
Kenduskeag town, ME
Milford town, ME
Old Town city, ME
Orono town, ME
Orrington town, ME
Penobscot Indian Island Reservation, ME
Veazie town, ME

Bangor, ME MSA—Con.

Waldo County, ME (part)
Winterport town, ME

Barnstable–Yarmouth, MA MSA

Barnstable County, MA (part)
Barnstable city, MA
Brewster town, MA
Chatham town, MA
Dennis town, MA
Eastham town, MA
Harwich town, MA
Mashpee town, MA
Orleans town, MA
Sandwich town, MA
Yarmouth town, MA

Baton Rouge, LA MSA

Ascension Parish, LA
East Baton Rouge Parish, LA
Livingston Parish, LA
West Baton Rouge Parish, LA

Beaumont–Port Arthur, TX MSA

Hardin County, TX
Jefferson County, TX
Orange County, TX

Bellingham, WA MSA

Whatcom County, WA

Benton Harbor, MI MSA

Berrien County, MI

Bergen–Passaic, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Billings, MT MSA

Yellowstone County, MT

Biloxi–Gulfport–Pascagoula, MS MSA

Hancock County, MS
Harrison County, MS
Jackson County, MS

Binghamton, NY MSA

Broome County, NY
Tioga County, NY

Birmingham, AL MSA

Blount County, AL
Jefferson County, AL
St. Clair County, AL
Shelby County, AL

Bismarck, ND MSA

Burleigh County, ND
Morton County, ND

Bloomington, IN MSA

Monroe County, IN

Bloomington–Normal, IL MSA

McLean County, IL

Boise City, ID MSA

Ada County, ID

Canyon County, ID

**Boston, MA–NH PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA**

Boston, MA–NH PMSA

Bristol County, MA (part)

Berkley town, MA

Dighton town, MA

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Essex town, MA

Gloucester city, MA

Hamilton town, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Manchester town, MA

Marblehead town, MA

Middleton town, MA

Nahant town, MA

Newbury town, MA

Newburyport city, MA

Peabody city, MA

Rockport town, MA

Rowley town, MA

Salem city, MA

Salisbury town, MA

Saugus town, MA

Swampscott town, MA

Topsfield town, MA

Wenham town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Holliston town, MA

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Lincoln town, MA

Littleton town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Sherborn town, MA

Shirley town, MA

Somerville city, MA

Stoneham town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Middlesex County, MA (part)

Stow town, MA

Sudbury town, MA

Townsend town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

Winchester town, MA

Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Cohasset town, MA

Dedham town, MA

Dover town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Millis town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Plainville town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Norwell town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

Suffolk County, MA

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA

Blackstone town, MA

Bolton town, MA

Harvard town, MA

Hopedale town, MA

Lancaster town, MA

Mendon town, MA

Milford town, MA

Millville town, MA

Southborough town, MA

Upton town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Rockingham County, NH (part)

Seabrook town, NH

South Hampton town, NH

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Halifax town, MA

Hanson town, MA

Lakeville town, MA

Middleborough town, MA

Plympton town, MA

West Bridgewater town, MA

Whitman town, MA

Fitchburg–Leominster, MA PMSA

Middlesex County, MA (part)

Ashby town, MA

Worcester County, MA (part)

Ashburnham town, MA

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lunenburg town, MA

Templeton town, MA

Westminster town, MA

Winchendon town, MA

Lawrence, MA–NH PMSA

Essex County, MA (part)

Andover town, MA

Boxford town, MA

Georgetown town, MA

Groveland town, MA

Haverhill city, MA

Lawrence city, MA

Merrimac town, MA

Methuen city, MA

North Andover town, MA

West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH

Chester town, NH

Danville town, NH

Derry town, NH

Fremont town, NH

Hampstead town, NH

Kingston town, NH

Newton town, NH

Plaistow town, NH

Raymond town, NH

Salem town, NH

Sandown town, NH

Windham town, NH

Lowell, MA–NH PMSA

Middlesex County, MA (part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Dunstable town, MA

Groton town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Tyngsborough town, MA

Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Manchester, NH PMSA
 Hillsborough County, NH (part)
 Bedford town, NH
 Goffstown town, NH
 Manchester city, NH
 Weare town, NH
 Merrimack County, NH (part)
 Allentown town, NH
 Hooksett town, NH
 Rockingham County, NH (part)
 Auburn town, NH
 Candia town, NH
 Londonderry town, NH
 Nashua, NH PMSA
 Hillsborough County, NH (part)
 Amherst town, NH
 Brookline town, NH
 Greenville town, NH
 Hollis town, NH
 Hudson town, NH
 Litchfield town, NH
 Mason town, NH
 Merrimack town, NH
 Milford town, NH
 Mont Vernon town, NH
 Nashua city, NH
 New Ipswich town, NH
 Wilton town, NH
 New Bedford, MA PMSA
 Bristol County, MA (part)
 Acushnet town, MA
 Dartmouth town, MA
 Fairhaven town, MA
 Freetown town, MA
 New Bedford city, MA
 Plymouth County, MA (part)
 Marion town, MA
 Mattapoisett town, MA
 Rochester town, MA
 Portsmouth–Rochester, NH–ME PMSA
 York County, ME (part)
 Berwick town, ME
 Eliot town, ME
 Kittery town, ME
 South Berwick town, ME
 York town, ME
 Rockingham County, NH (part)
 Brentwood town, NH
 East Kingston town, NH
 Epping town, NH
 Exeter town, NH
 Greenland town, NH
 Hampton town, NH
 Hampton Falls town, NH
 Kensington town, NH
 New Castle town, NH
 Newfields town, NH
 Newington town, NH
 Newmarket town, NH
 North Hampton town, NH
 Portsmouth city, NH
 Rye town, NH
 Stratham town, NH
 Strafford County, NH (part)
 Barrington town, NH
 Dover city, NH
 Durham town, NH
 Farmington town, NH
 Lee town, NH
 Madbury town, NH
 Milton town, NH
 Rochester city, NH
 Rollinsford town, NH
 Somersworth city, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Worcester, MA–CT PMSA
 Windham County, CT (part)
 Thompson town, CT
 Hampden County, MA (part)
 Holland town, MA
 Worcester County, MA (part)
 Auburn town, MA
 Barre town, MA
 Boylston town, MA
 Brookfield town, MA
 Charlton town, MA
 Clinton town, MA
 Douglas town, MA
 Dudley town, MA
 East Brookfield town, MA
 Grafton town, MA
 Holden town, MA
 Leicester town, MA
 Millbury town, MA
 Northborough town, MA
 Northbridge town, MA
 North Brookfield town, MA
 Oakham town, MA
 Oxford town, MA
 Paxton town, MA
 Princeton town, MA
 Rutland town, MA
 Shrewsbury town, MA
 Southbridge town, MA
 Spencer town, MA
 Sterling town, MA
 Sturbridge town, MA
 Sutton town, MA
 Uxbridge town, MA
 Webster town, MA
 Westborough town, MA
 West Boylston town, MA
 West Brookfield town, MA
 Worcester city, MA

**Boulder–Longmont, CO PMSA—see
Denver–Boulder–Greeley, CO CMSA****Brazoria, TX PMSA—see Houston–
Galveston–Brazoria, TX CMSA****Bremerton, WA PMSA—see Seattle–
Tacoma–Bremerton, WA CMSA****Bridgeport, CT PMSA—see New York–
Northern New Jersey–Long Island, NY–
NJ–CT–PA CMSA****Brockton, MA PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Brownsville–Harlingen–San Benito, TX MSA**
Cameron County, TX**Bryan–College Station, TX MSA**
Brazos County, TX**Buffalo–Niagara Falls, NY MSA**
Erie County, NY
Niagara County, NY

Burlington, VT MSA
 Chittenden County, VT (part)
 Burlington city, VT
 Charlotte town, VT
 Colchester town, VT
 Essex Junction village, VT
 Essex town balance, VT
 Hinesburg town, VT
 Jericho town, VT
 Jericho village, VT
 Milton town, VT
 Milton village, VT
 Richmond town, VT
 St. George town, VT
 Shelburne town, VT

Burlington, VT MSA—Con.
 Chittenden County, VT (part)—Con.
 South Burlington city, VT
 Williston town, VT
 Winooski city, VT
 Franklin County, VT (part)
 Fairfax town, VT
 Georgia town, VT
 St. Albans city, VT
 St. Albans town, VT
 Swanton town, VT
 Swanton village, VT
 Grand Isle County, VT (part)
 Grand Isle town, VT
 South Hero town, VT

Canton–Massillon, OH MSA
Carroll County, OH
Stark County, OH**Casper, WY MSA**
Natrona County, WY**Cedar Rapids, IA MSA**
Linn County, IA**Champaign–Urbana, IL MSA**
Champaign County, IL**Charleston–North Charleston, SC MSA**
Berkeley County, SC
Charleston County, SC
Dorchester County, SC**Charleston, WV MSA**
Kanawha County, WV
Putnam County, WV**Charlotte–Gastonia–Rock Hill, NC–SC MSA**
Cabarrus County, NC
Gaston County, NC
Lincoln County, NC
Mecklenburg County, NC
Rowan County, NC
Union County, NC
York County, SC**Charlottesville, VA MSA**
Albemarle County, VA
Fluvanna County, VA
Greene County, VA
Charlottesville city, VA**Chattanooga, TN–GA MSA**
Catoosa County, GA
Dade County, GA
Walker County, GA
Hamilton County, TN
Marion County, TN**Cheyenne, WY MSA**
Laramie County, WY**Chicago, IL PMSA—see Chicago–Gary–
Kenosha, IL–IN–WI CMSA**

Chicago–Gary–Kenosha, IL–IN–WI CMSA
 Chicago, IL PMSA
 Cook County, IL
 DeKalb County, IL
 DuPage County, IL
 Grundy County, IL
 Kane County, IL
 Kendall County, IL
 Lake County, IL
 McHenry County, IL
 Will County, IL
 Gary, IN PMSA
 Lake County, IN
 Porter County, IN
 Kankakee, IL PMSA
 Kankakee County, IL

Chicago–Gary–Kenosha, IL–IN–WI CMSA—Con.

Kenosha, WI PMSA
Kenosha County, WI

Chico–Paradise, CA MSA

Butte County, CA

Cincinnati, OH–KY–IN PMSA—see**Cincinnati–Hamilton, OH–KY–IN CMSA****Cincinnati–Hamilton, OH–KY–IN CMSA**

Cincinnati, OH–KY–IN PMSA
Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH
Hamilton–Middletown, OH PMSA
Butler County, OH

Clarksville–Hopkinsville, TN–KY MSA

Christian County, KY
Montgomery County, TN

Cleveland–Lorain–Elyria, OH PMSA—see**Cleveland–Akron, OH CMSA****Cleveland–Akron, OH CMSA**

Akron, OH PMSA
Portage County, OH
Summit County, OH
Cleveland–Lorain–Elyria, OH PMSA
Ashtabula County, OH
Cuyahoga County, OH
Geauga County, OH
Lake County, OH
Lorain County, OH
Medina County, OH

Colorado Springs, CO MSA

El Paso County, CO

Columbia, MO MSA

Boone County, MO

Columbia, SC MSA

Lexington County, SC
Richland County, SC

Columbus, GA–AL MSA

Russell County, AL
Chattahoochee County, GA
Harris County, GA
Muscogee County, GA

Columbus, OH MSA

Delaware County, OH
Fairfield County, OH
Franklin County, OH
Licking County, OH
Madison County, OH
Pickaway County, OH

Corpus Christi, TX MSA

Nueces County, TX
San Patricio County, TX

Cumberland, MD–WV MSA

Allegany County, MD
Mineral County, WV

Dallas, TX PMSA—see Dallas–Fort Worth, TX CMSA**Dallas–Fort Worth, TX CMSA**

Dallas, TX PMSA
Collin County, TX
Dallas County, TX
Denton County, TX
Ellis County, TX
Henderson County, TX
Hunt County, TX
Kaufman County, TX
Rockwall County, TX
Fort Worth–Arlington, TX PMSA
Hood County, TX
Johnson County, TX
Parker County, TX
Tarrant County, TX

Danbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Danville, VA MSA**

Pittsylvania County, VA
Danville city, VA

Davenport–Moline–Rock Island, IA–IL MSA

Henry County, IL
Rock Island County, IL
Scott County, IA

Dayton–Springfield, OH MSA

Clark County, OH
Greene County, OH
Miami County, OH
Montgomery County, OH

Daytona Beach, FL MSA

Flagler County, FL
Volusia County, FL

Decatur, AL MSA

Lawrence County, AL
Morgan County, AL

Decatur, IL MSA

Macon County, IL

Denver, CO PMSA—see Denver–Boulder–Greeley, CO CMSA**Denver–Boulder–Greeley, CO CMSA**

Boulder–Longmont, CO PMSA
Boulder County, CO
Denver, CO PMSA
Adams County, CO
Arapahoe County, CO
Denver County, CO
Douglas County, CO
Jefferson County, CO
Greeley, CO PMSA
Weld County, CO

Des Moines, IA MSA

Dallas County, IA
Polk County, IA
Warren County, IA

Detroit, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA**Detroit–Ann Arbor–Flint, MI CMSA**

Ann Arbor, MI PMSA
Lenawee County, MI
Livingston County, MI
Washtenaw County, MI
Detroit, MI PMSA
Lapeer County, MI
Macomb County, MI
Monroe County, MI
Oakland County, MI
St. Clair County, MI
Wayne County, MI

Detroit–Ann Arbor–Flint, MI CMSA—Con.

Flint, MI PMSA
Genesee County, MI

Dothan, AL MSA

Dale County, AL
Houston County, AL

Dover, DE MSA

Kent County, DE

Dubuque, IA MSA

Dubuque County, IA

Duluth–Superior, MN–WI MSA

St. Louis County, MN
Douglas County, WI

Dutchess County, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Eau Claire, WI MSA**

Chippewa County, WI
Eau Claire County, WI

El Paso, TX MSA

El Paso County, TX

Elkhart–Goshen, IN MSA

Elkhart County, IN

Elmira, NY MSA

Chemung County, NY

Enid, OK MSA

Garfield County, OK

Erie, PA MSA

Erie County, PA

Eugene–Springfield, OR MSA

Lane County, OR

Evansville–Henderson, IN–KY MSA

Posey County, IN
Vanderburgh County, IN
Warrick County, IN
Henderson County, KY

Fargo–Moorhead, ND–MN MSA

Clay County, MN
Cass County, ND

Fayetteville, NC MSA

Cumberland County, NC

Fayetteville–Springdale–Rogers, AR MSA

Benton County, AR
Washington County, AR

Fitchburg–Leominster, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Flint, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA****Florence, AL MSA**

Colbert County, AL
Lauderdale County, AL

Florence, SC MSA

Florence County, SC

Fort Collins–Loveland, CO MSA

Larimer County, CO

Fort Lauderdale, FL PMSA—see Miami–Fort Lauderdale, FL CMSA**Fort Myers–Cape Coral, FL MSA**

Lee County, FL

Fort Pierce–Port St. Lucie, FL MSA

Martin County, FL
St. Lucie County, FL

Fort Smith, AR—OK MSA
Crawford County, AR
Sebastian County, AR
Sequoyah County, OK

Fort Walton Beach, FL MSA
Okaloosa County, FL

Fort Wayne, IN MSA
Adams County, IN
Allen County, IN
De Kalb County, IN
Huntington County, IN
Wells County, IN
Whitley County, IN

**Fort Worth—Arlington, TX PMSA—see
Dallas—Fort Worth, TX CMSA**

Fresno, CA MSA
Fresno County, CA
Madera County, CA

Gadsden, AL MSA
Etowah County, AL

Gainesville, FL MSA
Alachua County, FL

**Galveston—Texas City, TX PMSA—see
Houston—Galveston—Brazoria, TX CMSA**

**Gary, IN PMSA—see Chicago—Gary—
Kenosha, IL—IN—WI CMSA**

Glens Falls, NY MSA
Warren County, NY
Washington County, NY

Goldsboro, NC MSA
Wayne County, NC

Grand Forks, ND—MN MSA
Polk County, MN
Grand Forks County, ND

Grand Rapids—Muskegon—Holland, MI MSA
Allegan County, MI
Kent County, MI
Muskegon County, MI
Ottawa County, MI

Great Falls, MT MSA
Cascade County, MT

**Greeley, CO PMSA—see Denver—Boulder—
Greeley, CO CMSA**

Green Bay, WI MSA
Brown County, WI

**Greensboro—Winston-Salem—High Point, NC
MSA**
Alamance County, NC
Davidson County, NC
Davie County, NC
Forsyth County, NC
Guilford County, NC
Randolph County, NC
Stokes County, NC
Yadkin County, NC

Greenville, NC MSA
Pitt County, NC

Greenville—Spartanburg—Anderson, SC MSA
Anderson County, SC
Cherokee County, SC
Greenville County, SC
Pickens County, SC
Spartanburg County, SC

**Hagerstown, MD PMSA—see Washington—
Baltimore, DC—MD—VA—WV CMSA**

**Hamilton—Middletown, OH PMSA—see
Cincinnati—Hamilton, OH—KY—IN CMSA**

Harrisburg—Lebanon—Carlisle, PA MSA
Cumberland County, PA
Dauphin County, PA
Lebanon County, PA
Perry County, PA

Hartford, CT MSA
Hartford County, CT (part)
Avon town, CT
Berlin town, CT
Bloomfield town, CT
Bristol city, CT
Burlington town, CT
Canton town, CT
East Granby town, CT
East Hartford town, CT
East Windsor town, CT
Enfield town, CT
Farmington town, CT
Glastonbury town, CT
Granby town, CT
Hartford city, CT
Manchester town, CT
Marlborough town, CT
New Britain city, CT
Newington town, CT
Plainville town, CT
Rocky Hill town, CT
Simsbury town, CT
Southington town, CT
South Windsor town, CT
Suffield town, CT
West Hartford town, CT
Wethersfield town, CT
Windsor town, CT
Windsor Locks town, CT

Litchfield County, CT (part)
Barkhamsted town, CT
Harwinton town, CT
New Hartford town, CT
Plymouth town, CT
Winchester town, CT

Middlesex County, CT (part)
Cromwell town, CT
Durham town, CT
East Haddam town, CT
East Hampton town, CT
Haddam town, CT
Middlefield town, CT
Middletown city, CT
Portland town, CT

New London County, CT (part)
Colchester town, CT
Lebanon town, CT

Tolland County, CT (part)
Andover town, CT
Bolton town, CT
Columbia town, CT
Coventry town, CT
Ellington town, CT
Hebron town, CT
Mansfield town, CT
Somers town, CT
Stafford town, CT
Tolland town, CT
Vernon town, CT
Willington town, CT

Windham County, CT (part)
Ashford town, CT
Chaplin town, CT
Windham town, CT

Hickory—Morganton, NC MSA
Alexander County, NC
Burke County, NC
Caldwell County, NC
Catawba County, NC

Honolulu, HI MSA
Honolulu County, HI

Houma, LA MSA
Lafourche Parish, LA
Terrebonne Parish, LA

**Houston, TX PMSA—see Houston—Galveston—
Brazoria, TX CMSA**

Houston—Galveston—Brazoria, TX CMSA
Brazoria, TX PMSA
Brazoria County, TX
Galveston—Texas City, TX PMSA
Galveston County, TX
Houston, TX PMSA
Chambers County, TX
Fort Bend County, TX
Harris County, TX
Liberty County, TX
Montgomery County, TX
Waller County, TX

Huntington—Ashland, WV—KY—OH MSA
Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Huntsville, AL MSA
Limestone County, AL
Madison County, AL

Indianapolis, IN MSA
Boone County, IN
Hamilton County, IN
Hancock County, IN
Hendricks County, IN
Johnson County, IN
Madison County, IN
Marion County, IN
Morgan County, IN
Shelby County, IN

Iowa City, IA MSA
Johnson County, IA

Jackson, MI MSA
Jackson County, MI

Jackson, MS MSA
Hinds County, MS
Madison County, MS
Rankin County, MS

Jackson, TN MSA
Madison County, TN

Jacksonville, FL MSA
Clay County, FL
Duval County, FL
Nassau County, FL
St. Johns County, FL

Jacksonville, NC MSA
Onslow County, NC

Jamestown, NY MSA
Chautauqua County, NY

Janesville—Beloit, WI MSA
Rock County, WI

Jersey City, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Johnson City–Kingsport–Bristol, TN–VA MSA

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol city, VA

Johnstown, PA MSA

Cambria County, PA
Somerset County, PA

Joplin, MO MSA

Jasper County, MO
Newton County, MO

Kalamazoo–Battle Creek, MI MSA

Calhoun County, MI
Kalamazoo County, MI
Van Buren County, MI

Kankakee, IL PMSA—see Chicago–Gary–Kenosha, IL–IN–WI CMSA

Kansas City, MO–KS MSA

Johnson County, KS
Leavenworth County, KS
Miami County, KS
Wyandotte County, KS
Cass County, MO
Clay County, MO
Clinton County, MO
Jackson County, MO
Lafayette County, MO
Platte County, MO
Ray County, MO

Kenosha, WI PMSA—see Chicago–Gary–Kenosha, IL–IN–WI CMSA

Killeen–Temple, TX MSA

Bell County, TX
Coryell County, TX

Knoxville, TN MSA

Anderson County, TN
Blount County, TN
Knox County, TN
Loudon County, TN
Sevier County, TN
Union County, TN

Kokomo, IN MSA

Howard County, IN
Tipton County, IN

La Crosse, WI–MN MSA

Houston County, MN
La Crosse County, WI

Lafayette, LA MSA

Acadia Parish, LA
Lafayette Parish, LA
St. Landry Parish, LA
St. Martin Parish, LA

Lafayette, IN MSA

Clinton County, IN
Tippecanoe County, IN

Lake Charles, LA MSA

Calcasieu Parish, LA

Lakeland–Winter Haven, FL MSA

Polk County, FL

Lancaster, PA MSA

Lancaster County, PA

Lansing–East Lansing, MI MSA

Clinton County, MI
Eaton County, MI
Ingham County, MI

Laredo, TX MSA

Webb County, TX

Las Cruces, NM MSA

Dona Ana County, NM

Las Vegas, NV–AZ MSA

Mohave County, AZ
Clark County, NV
Nye County, NV

Lawrence, KS MSA

Douglas County, KS

Lawrence, MA–NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Lawton, OK MSA

Comanche County, OK

Lewiston–Auburn, ME MSA

Androscoggin County, ME (part)
Auburn city, ME
Greene town, ME
Lewiston city, ME
Lisbon town, ME
Mechanic Falls town, ME
Poland town, ME
Sabattus town, ME
Turner town, ME
Wales town, ME

Lexington, KY MSA

Bourbon County, KY
Clark County, KY
Fayette County, KY
Jessamine County, KY
Madison County, KY
Scott County, KY
Woodford County, KY

Lima, OH MSA

Allen County, OH
Auglaize County, OH

Lincoln, NE MSA

Lancaster County, NE

Little Rock–North Little Rock, AR MSA

Faulkner County, AR
Lonoke County, AR
Pulaski County, AR
Saline County, AR

Longview–Marshall, TX MSA

Gregg County, TX
Harrison County, TX
Upshur County, TX

Los Angeles–Riverside–Orange County, CA CMSA

Los Angeles–Long Beach, CA PMSA
Los Angeles County, CA
Orange County, CA PMSA
Orange County, CA
Riverside–San Bernardino, CA PMSA
Riverside County, CA
San Bernardino County, CA
Ventura, CA PMSA
Ventura County, CA

Los Angeles–Long Beach, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Louisville, KY–IN MSA

Clark County, IN
Floyd County, IN
Harrison County, IN
Scott County, IN
Bullitt County, KY
Jefferson County, KY
Oldham County, KY

Lowell, MA–NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Lubbock, TX MSA

Lubbock County, TX

Lynchburg, VA MSA

Amherst County, VA
Bedford County, VA
Campbell County, VA
Bedford city, VA
Lynchburg city, VA

Macon, GA MSA

Bibb County, GA
Houston County, GA
Jones County, GA
Peach County, GA
Twiggs County, GA

Madison, WI MSA

Dane County, WI

Manchester, NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Mansfield, OH MSA

Crawford County, OH
Richland County, OH

McAllen–Edinburg–Mission, TX MSA

Hidalgo County, TX

Medford–Ashland, OR MSA

Jackson County, OR

Melbourne–Titusville–Palm Bay, FL MSA

Brevard County, FL

Memphis, TN–AR–MS MSA

Crittenden County, AR
DeSoto County, MS
Fayette County, TN
Shelby County, TN
Tipton County, TN

Merced, CA MSA

Merced County, CA

Miami–Fort Lauderdale, FL CMSA

Fort Lauderdale, FL PMSA
Broward County, FL
Miami, FL PMSA
Dade County, FL

Miami, FL PMSA—see Miami–Fort Lauderdale, FL CMSA

Middlesex–Somerset–Hunterdon, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Milwaukee–Waukesha, WI PMSA—see Milwaukee–Racine, WI CMSA

Milwaukee–Racine, WI CMSA

Milwaukee–Waukesha, WI PMSA
Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI

Milwaukee–Racine, WI CMSA—Con.

Racine, WI PMSA
Racine County, WI

Minneapolis–St. Paul, MN–WI MSA

Anoka County, MN
Carver County, MN
Chisago County, MN
Dakota County, MN
Hennepin County, MN
Isanti County, MN
Ramsey County, MN
Scott County, MN
Sherburne County, MN
Washington County, MN
Wright County, MN
Pierce County, WI
St. Croix County, WI

Mobile, AL MSA

Baldwin County, AL
Mobile County, AL

Modesto, CA MSA

Stanislaus County, CA

Monmouth–Ocean, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Monroe, LA MSA**

Ouachita Parish, LA

Montgomery, AL MSA

Autauga County, AL
Elmore County, AL
Montgomery County, AL

Muncie, IN MSA

Delaware County, IN

Myrtle Beach, SC MSA

Horry County, SC

Naples, FL MSA

Collier County, FL

Nashua, NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Nashville, TN MSA**

Cheatham County, TN
Davidson County, TN
Dickson County, TN
Robertson County, TN
Rutherford County, TN
Sumner County, TN
Williamson County, TN
Wilson County, TN

Nassau–Suffolk, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New Bedford, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****New Haven–Meriden, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New London–Norwich, CT–RI MSA**

Middlesex County, CT (part)
Fenwick borough, CT
Old Saybrook town, CT
New London County, CT (part)
Bozrah town, CT
East Lyme town, CT
Franklin town, CT
Griswold town balance, CT
Groton city, CT
Groton town balance, CT

New London–Norwich, CT–RI MSA—Con.

New London County, CT (part)—Con.
Groton Long Point borough, CT
Jewett City borough, CT
Ledyard town, CT
Lisbon town, CT
Montville town, CT
New London city, CT
North Stonington town, CT
Norwich city, CT
Old Lyme town, CT
Preston town, CT
Salem town, CT
Sprague town, CT
Stonington borough, CT
Stonington town, CT
Waterford town, CT
Windham County, CT (part)
Canterbury town, CT
Plainfield town, CT
Washington County, RI (part)
Hopkinton town, RI
Westerly town, RI

New Orleans, LA MSA

Jefferson Parish, LA
Orleans Parish, LA
Plaquemines Parish, LA
St. Bernard Parish, LA
St. Charles Parish, LA
St. James Parish, LA
St. John the Baptist Parish, LA
St. Tammany Parish, LA

New York, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**

Bergen–Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (part)
Bridgeport city, CT
Easton town, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (part)
Ansonia city, CT
Beacon Falls town, CT
Derby city, CT
Milford city (balance), CT
Oxford town, CT
Seymour town, CT
Woodmont borough, CT
Danbury, CT PMSA
Fairfield County, CT (part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown borough, CT
Newtown town, CT
Redding town, CT
Ridgefield town, CT
Sherman town, CT
Litchfield County, CT (part)
Bridgewater town, CT
New Milford town, CT
Roxbury town, CT
Washington town, CT
Dutchess County, NY PMSA
Dutchess County, NY

New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA—Con.

Jersey City, NJ PMSA
Hudson County, NJ
Middlesex–Somerset–Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth–Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau–Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY
New Haven–Meriden, CT PMSA
Middlesex County, CT (part)
Clinton town, CT
Killingworth town, CT
New Haven County, CT (part)
Bethany town, CT
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT
Woodbridge town, CT
New York, NY PMSA
Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY
Queens County, NY
Richmond County, NY
Rockland County, NY
Westchester County, NY
Newark, NJ PMSA
Essex County, NJ
Morris County, NJ
Sussex County, NJ
Union County, NJ
Warren County, NJ
Newburgh, NY–PA PMSA
Orange County, NY
Pike County, PA
Stamford–Norwalk, CT PMSA
Fairfield County, CT (part)
Darien town, CT
Greenwich town, CT
New Canaan town, CT
Norwalk city, CT
Stamford city, CT
Weston town, CT
Westport town, CT
Wilton town, CT
Trenton, NJ PMSA
Mercer County, NJ
Waterbury, CT PMSA
Litchfield County, CT (part)
Bethlehem town, CT
Thomaston town, CT
Watertown town, CT
Woodbury town, CT
New Haven County, CT (part)
Middlebury town, CT
Naugatuck borough, CT
Prospect town, CT
Southbury town, CT
Waterbury city, CT
Wolcott town, CT

Newark, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Newburgh, NY–PA PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Norfolk–Virginia Beach–Newport News, VA–NC MSA

Currituck County, NC
Gloucester County, VA
Isle of Wight County, VA
James City County, VA
Mathews County, VA
York County, VA
Chesapeake city, VA
Hampton city, VA
Newport News city, VA
Norfolk city, VA
Poquoson city, VA
Portsmouth city, VA
Suffolk city, VA
Virginia Beach city, VA
Williamsburg city, VA

Oakland, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Ocala, FL MSA

Marion County, FL

Odessa–Midland, TX MSA

Ector County, TX
Midland County, TX

Oklahoma City, OK MSA

Canadian County, OK
Cleveland County, OK
Logan County, OK
McClain County, OK
Oklahoma County, OK
Pottawatomie County, OK

Olympia, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Omaha, NE–IA MSA

Pottawattamie County, IA
Cass County, NE
Douglas County, NE
Sarpy County, NE
Washington County, NE

Orange County, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Orlando, FL MSA

Lake County, FL
Orange County, FL
Osceola County, FL
Seminole County, FL

Owensboro, KY MSA

Daviess County, KY

Panama City, FL MSA

Bay County, FL

Parkersburg–Marietta, WV–OH MSA

Washington County, OH
Wood County, WV

Pensacola, FL MSA

Escambia County, FL
Santa Rosa County, FL

Peoria–Pekin, IL MSA

Peoria County, IL
Tazewell County, IL
Woodford County, IL

Philadelphia, PA–NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Atlantic–Cape May, NJ PMSA

Atlantic County, NJ
Cape May County, NJ

Philadelphia, PA–NJ PMSA

Burlington County, NJ
Camden County, NJ
Gloucester County, NJ
Salem County, NJ
Bucks County, PA
Chester County, PA
Delaware County, PA
Montgomery County, PA

Philadelphia County, PA

Vineland–Millville–Bridgeton, NJ PMSA
Cumberland County, NJ

Wilmington–Newark, DE–MD PMSA
New Castle County, DE
Cecil County, MD

Phoenix–Mesa, AZ MSA

Maricopa County, AZ
Pinal County, AZ

Pine Bluff, AR MSA

Jefferson County, AR

Pittsburgh, PA MSA

Allegheny County, PA
Beaver County, PA
Butler County, PA
Fayette County, PA
Washington County, PA
Westmoreland County, PA

Pittsfield, MA MSA

Berkshire County, MA (part)
Adams town, MA
Cheshire town, MA
Dalton town, MA
Hinsdale town, MA
Lanesborough town, MA
Lee town, MA
Lenox town, MA
Pittsfield city, MA
Richmond town, MA
Stockbridge town, MA

Portland, ME MSA

Cumberland County, ME (part)
Cape Elizabeth town, ME
Casco town, ME
Cumberland town, ME
Falmouth town, ME
Freeport town, ME
Gorham town, ME
Gray town, ME
North Yarmouth town, ME
Portland city, ME
Raymond town, ME
Scarborough town, ME
South Portland city, ME
Standish town, ME
Westbrook city, ME
Windham town, ME
Yarmouth town, ME

York County, ME (part)

Buxton town, ME
Hollis town, ME
Limington town, ME
Old Orchard Beach town, ME

Portland–Vancouver, OR–WA PMSA—see Portland–Salem, OR–WA CMSA

Portland–Salem, OR–WA CMSA

Portland–Vancouver, OR–WA PMSA

Clackamas County, OR
Columbia County, OR
Multnomah County, OR
Washington County, OR
Yamhill County, OR
Clark County, WA

Salem, OR PMSA

Marion County, OR
Polk County, OR

Portsmouth–Rochester, NH–ME PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Providence–Fall River–Warwick, RI–MA MSA

Bristol County, MA (part)
Attleboro city, MA
Fall River city, MA
North Attleborough town, MA
Rehoboth town, MA
Seekonk town, MA
Somerset town, MA
Swansea town, MA
Westport town, MA
Bristol County, RI
Barrington town, RI
Bristol town, RI
Warren town, RI
Kent County, RI
Coventry town, RI
East Greenwich town, RI
Warwick city, RI
West Greenwich town, RI
West Warwick town, RI
Newport County, RI (part)
Jamestown town, RI
Little Compton town, RI
Tiverton town, RI

Providence County, RI
Burrillville town, RI
Central Falls city, RI
Cranston city, RI
Cumberland town, RI
East Providence city, RI
Foster town, RI
Glocester town, RI
Johnston town, RI
Lincoln town, RI
North Providence town, RI
North Smithfield town, RI
Pawtucket city, RI
Providence city, RI
Scituate town, RI
Smithfield town, RI
Woonsocket city, RI
Washington County, RI (part)
Charlestown town, RI
Exeter town, RI
Narragansett town, RI
North Kingstown town, RI
Richmond town, RI
South Kingstown town, RI

Provo–Orem, UT MSA

Utah County, UT

Pueblo, CO MSA

Pueblo County, CO

Punta Gorda, FL MSA

Charlotte County, FL

Racine, WI PMSA—see Milwaukee—Racine, WI CMSA

Raleigh—Durham—Chapel Hill, NC MSA

Chatham County, NC
Durham County, NC
Franklin County, NC
Johnston County, NC
Orange County, NC
Wake County, NC

Rapid City, SD MSA

Pennington County, SD

Reading, PA MSA

Berks County, PA

Redding, CA MSA

Shasta County, CA

Reno, NV MSA

Washoe County, NV

Richland—Kennewick—Pasco, WA MSA

Benton County, WA
Franklin County, WA

Richmond—Petersburg, VA MSA

Charles City County, VA
Chesterfield County, VA
Dinwiddie County, VA
Goochland County, VA
Hanover County, VA
Henrico County, VA
New Kent County, VA
Powhatan County, VA
Prince George County, VA
Colonial Heights city, VA
Hopewell city, VA
Petersburg city, VA
Richmond city, VA

Riverside—San Bernardino, CA PMSA—see Los Angeles—Riverside—Orange County, CA CMSA

Roanoke, VA MSA

Botetourt County, VA
Roanoke County, VA
Roanoke city, VA
Salem city, VA

Rochester, MN MSA

Olmsted County, MN

Rochester, NY MSA

Genesee County, NY
Livingston County, NY
Monroe County, NY
Ontario County, NY
Orleans County, NY
Wayne County, NY

Rockford, IL MSA

Boone County, IL
Ogle County, IL
Winnebago County, IL

Rocky Mount, NC MSA

Edgecombe County, NC
Nash County, NC

Sacramento, CA PMSA—see Sacramento—Yolo, CA CMSA

Sacramento—Yolo, CA CMSA

Sacramento, CA PMSA
El Dorado County, CA
Placer County, CA
Sacramento County, CA
Yolo, CA PMSA
Yolo County, CA

Saginaw—Bay City—Midland, MI MSA

Bay County, MI
Midland County, MI
Saginaw County, MI

St. Cloud, MN MSA

Benton County, MN
Stearns County, MN

St. Joseph, MO MSA

Andrew County, MO
Buchanan County, MO

St. Louis, MO—IL MSA

Clinton County, IL
Jersey County, IL
Madison County, IL
Monroe County, IL
St. Clair County, IL
Franklin County, MO
Jefferson County, MO
Lincoln County, MO
St. Charles County, MO
St. Louis County, MO
Warren County, MO
St. Louis city, MO

Salem, OR PMSA—see Portland—Salem, OR—WA CMSA

Salinas, CA MSA

Monterey County, CA

Salt Lake City—Ogden, UT MSA

Davis County, UT
Salt Lake County, UT
Weber County, UT

San Angelo, TX MSA

Tom Green County, TX

San Antonio, TX MSA

Bexar County, TX
Comal County, TX
Guadalupe County, TX
Wilson County, TX

San Diego, CA MSA

San Diego County, CA

San Francisco, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

San Francisco—Oakland—San Jose, CA CMSA

Oakland, CA PMSA
Alameda County, CA
Contra Costa County, CA
San Francisco, CA PMSA
Marin County, CA
San Francisco County, CA
San Mateo County, CA
San Jose, CA PMSA
Santa Clara County, CA
Santa Cruz—Watsonville, CA PMSA
Santa Cruz County, CA
Santa Rosa, CA PMSA
Sonoma County, CA
Vallejo—Fairfield—Napa, CA PMSA
Napa County, CA
Solano County, CA

San Jose, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

San Luis Obispo—Atascadero—Paso Robles, CA MSA

San Luis Obispo County, CA

Santa Barbara—Santa Maria—Lompoc, CA MSA

Santa Barbara County, CA

Santa Cruz—Watsonville, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Santa Fe, NM MSA

Los Alamos County, NM
Santa Fe County, NM

Santa Rosa, CA PMSA—see San Francisco—Oakland—San Jose, CA CMSA

Sarasota—Bradenton, FL MSA

Manatee County, FL
Sarasota County, FL

Savannah, GA MSA

Bryan County, GA
Chatham County, GA
Effingham County, GA

Scranton—Wilkes-Barre—Hazleton, PA MSA

Columbia County, PA
Lackawanna County, PA
Luzerne County, PA
Wyoming County, PA

Seattle—Bellevue—Everett, WA PMSA—see Seattle—Tacoma—Bremerton, WA CMSA

Seattle—Tacoma—Bremerton, WA CMSA

Bremerton, WA PMSA
Kitsap County, WA
Olympia, WA PMSA
Thurston County, WA
Seattle—Bellevue—Everett, WA PMSA
Island County, WA
King County, WA
Snohomish County, WA
Tacoma, WA PMSA
Pierce County, WA

Sharon, PA MSA

Mercer County, PA

Sheboygan, WI MSA

Sheboygan County, WI

Sherman—Denison, TX MSA

Grayson County, TX

Shreveport—Bossier City, LA MSA

Bossier Parish, LA
Caddo Parish, LA
Webster Parish, LA

Sioux City, IA—NE MSA

Woodbury County, IA
Dakota County, NE

Sioux Falls, SD MSA

Lincoln County, SD
Minnehaha County, SD

South Bend, IN MSA

St. Joseph County, IN

Spokane, WA MSA

Spokane County, WA

Springfield, IL MSA

Menard County, IL
Sangamon County, IL

Springfield, MO MSA

Christian County, MO
Greene County, MO
Webster County, MO

Springfield, MA MSA

Franklin County, MA (part)
Sunderland town, MA
Hampden County, MA (part)
Agawam city, MA
Chicopee city, MA

Springfield, MA MSA—Con.

Hampden County, MA (part)—Con.
 East Longmeadow town, MA
 Hampden town, MA
 Holyoke city, MA
 Longmeadow town, MA
 Ludlow town, MA
 Monson town, MA
 Montgomery town, MA
 Palmer town, MA
 Russell town, MA
 Southwick town, MA
 Springfield city, MA
 Westfield city, MA
 West Springfield town, MA
 Wilbraham town, MA
 Hampshire County, MA (part)
 Amherst town, MA
 Belchertown town, MA
 Easthampton town, MA
 Granby town, MA
 Hadley town, MA
 Hatfield town, MA
 Huntington town, MA
 Northampton city, MA
 Southampton town, MA
 South Hadley town, MA
 Ware town, MA
 Williamsburg town, MA

Stamford–Norwalk, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**State College, PA MSA**

Centre County, PA

Steubenville–Weirton, OH–WV MSA

Jefferson County, OH
 Brooke County, WV
 Hancock County, WV

Stockton–Lodi, CA MSA

San Joaquin County, CA

Sumter, SC MSA

Sumter County, SC

Syracuse, NY MSA

Cayuga County, NY
 Madison County, NY
 Onondaga County, NY
 Oswego County, NY

Tacoma, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA**Tallahassee, FL MSA**

Gadsden County, FL
 Leon County, FL

Tampa–St. Petersburg–Clearwater, FL MSA

Hernando County, FL
 Hillsborough County, FL
 Pasco County, FL
 Pinellas County, FL

Terre Haute, IN MSA

Clay County, IN
 Vermillion County, IN
 Vigo County, IN

Texarkana, TX–Texarkana, AR MSA

Miller County, AR
 Bowie County, TX

Toledo, OH MSA

Fulton County, OH
 Lucas County, OH
 Wood County, OH

Topeka, KS MSA

Shawnee County, KS

Trenton, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Tucson, AZ MSA**

Pima County, AZ

Tulsa, OK MSA

Creek County, OK
 Osage County, OK
 Rogers County, OK
 Tulsa County, OK
 Wagoner County, OK

Tuscaloosa, AL MSA

Tuscaloosa County, AL

Tyler, TX MSA

Smith County, TX

Utica–Rome, NY MSA

Herkimer County, NY
 Oneida County, NY

Vallejo–Fairfield–Napa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA**Ventura, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA****Victoria, TX MSA**

Victoria County, TX

Vineland–Millville–Bridgeton, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA**Visalia–Tulare–Porterville, CA MSA**

Tulare County, CA

Waco, TX MSA

McLennan County, TX

Washington, DC–MD–VA–WV PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA**Washington–Baltimore, DC–MD–VA–WV CMSA**

Baltimore, MD PMSA
 Anne Arundel County, MD
 Baltimore County, MD
 Carroll County, MD
 Harford County, MD
 Howard County, MD
 Queen Anne's County, MD
 Baltimore city, MD
 Hagerstown, MD PMSA
 Washington County, MD
 Washington, DC–MD–VA–WV PMSA
 District of Columbia, DC
 Calvert County, MD
 Charles County, MD
 Frederick County, MD
 Montgomery County, MD
 Prince George's County, MD
 Arlington County, VA
 Clarke County, VA
 Culpeper County, VA
 Fairfax County, VA

Washington–Baltimore, DC–MD–VA–WV CMSA—Con.

Washington, DC–MD–VA–WV PMSA—Con.
 Fauquier County, VA
 King George County, VA
 Loudoun County, VA
 Prince William County, VA
 Spotsylvania County, VA
 Stafford County, VA
 Warren County, VA
 Alexandria city, VA
 Fairfax city, VA
 Falls Church city, VA
 Fredericksburg city, VA
 Manassas city, VA
 Manassas Park city, VA
 Berkeley County, WV
 Jefferson County, WV

Waterbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Waterloo–Cedar Falls, IA MSA**

Black Hawk County, IA

Wausau, WI MSA

Marathon County, WI

West Palm Beach–Boca Raton, FL MSA

Palm Beach County, FL

Wheeling, WV–OH MSA

Belmont County, OH
 Marshall County, WV
 Ohio County, WV

Wichita, KS MSA

Butler County, KS
 Harvey County, KS
 Sedgwick County, KS

Wichita Falls, TX MSA

Archer County, TX
 Wichita County, TX

Williamsport, PA MSA

Lycoming County, PA

Wilmington–Newark, DE–MD PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA**Wilmington, NC MSA**

Brunswick County, NC
 New Hanover County, NC

Worcester, MA–CT PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA**Yakima, WA MSA**

Yakima County, WA

Yolo, CA PMSA—see Sacramento–Yolo, CA CMSA**York, PA MSA**

York County, PA

Youngstown–Warren, OH MSA

Columbiana County, OH
 Mahoning County, OH
 Trumbull County, OH

Yuba City, CA MSA

Sutter County, CA
 Yuba County, CA

Yuma, AZ MSA

Yuma County, AZ

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

- Printed reports [P]
- CD-ROM [C]
- Highlights online [+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through January 1996) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available March 1996 through May 1996) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available November 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

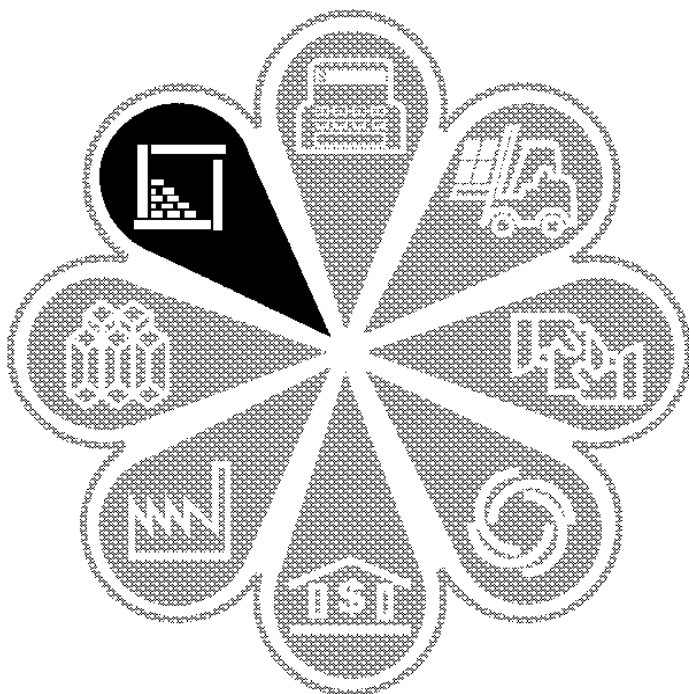
Census of Construction Industries

CC92-A-9

GEOGRAPHIC AREA SERIES

Pacific States

Alaska, California, Hawaii, Oregon,
Washington



Acknowledgments

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If you have any questions concerning the statistics in this report, call 301-457-4680.

1992

Census of

Construction Industries

CC92-A-9

GEOGRAPHIC AREA SERIES

Pacific States

Alaska, California, Hawaii, Oregon,
Washington

Issued May 1996



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Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
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BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director



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Pacific States

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

IV INTRODUCTION

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

CONSTRUCTION—GEOGRAPHIC AREA SERIES

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Assets and depreciation (gross book value):					
Beginning of year—buildings, machinery, and equipment	4				
End of year—total	2, 4	2	6	7	
End of year—buildings, machinery, and equipment	4				
Depreciation charges during year—buildings, machinery, and equipment	4				
Capital expenditures:					
Total capital expenditures	2, 4	2	6	7	11
New buildings—machinery and equipment	4				
Used buildings—machinery and equipment	4				
Communication services, costs for	3				
Employees:					
All employees—average number	1, 2, 3	2	6	7	11
Construction workers—average number	2, 3, 9	2, 9			
Construction workers—quarterly	3, 9	9			
Other employees—average number	3				
Other employees—quarterly	3				
Establishments:					
Number in business during year:					
All	1				
With payroll	1, 2, 3, 5, 9	2, 9	6	7	11
Without payroll	1				
Fringe benefits—legally required and voluntary expenditures	3				
Inventories	5				
Materials, components, supplies, and fuels—costs for	2, 3	2	6	7	11
Ownership—private or government owned	3				
Payroll:					
First-quarter, all employees	3				
Annual:					
All employees	2, 3	2	6	7	11
Construction workers	2, 3	2			
Other employees	3				
Power, fuels, and lubricants—costs for	3				
Proprietors and working partners:					
All establishments	1				
Establishments with payroll	1, 3				
Establishments without payroll	1				
Ratios, selected industry	10	10			
Receipts and value:					
Dollar value of business done:					
All establishments	1				
Establishments with payroll	1, 3		6	7	
Establishments without payroll	1				
Value of construction work, total	2, 3, 5, 8	2	6	7	11
For work subcontracted in from others	2, 3	2			
Other business receipts	3				

See footnotes at end of table.

Statistics	By State	By industry	By employment size	By size class of dollar value of business done	By CMSA, PMSA, and MSA ¹
Receipts and value:—Con.					
Net value of construction work.	2, 3	2	6	7	11
Value added.	2, 3	2	6	7	11
Rental costs:					
Total.	2, 3	2	6	7	
For machinery and equipment.	3				
For buildings.	3				
Repairs to buildings and other structures.	3				
Repairs to machinery and equipment.	3				
Subcontract work to others, costs for.	2, 3	2	6	7	11
Type and class of construction ²	8				

Note: Data for 1987 and earlier years are also available in some of these tables.

¹CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan statistical area.

²Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.



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-- Not applicable for this report.

Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Alaska. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 4,537 establishments in this State operating in the construction industries. These establishments accounted for \$2.0 billion in total dollar value of business done.

Most of the 4,537 construction establishments were small. Of the total, 2,861 were nonemployers, and over half of the employer establishments had less than 5 employees. The 690 construction establishments with 5 employees or more, while representing only 15 percent of all establishments, accounted for more than 83 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$1.93 billion in total dollar value of business done. Of this amount, \$1.88 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$400 million, leaving net value of construction work of \$1.5 billion. In addition, these establishments paid out \$694 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$922 million. (See Introduction and appendixes for explanation of terms.)

There were 1,676 establishments with total employment averaging 12,969 during the year. Total payroll for 1992 was \$473 million.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 2,861 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$87.8 million. Most of these establishments, about 78 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

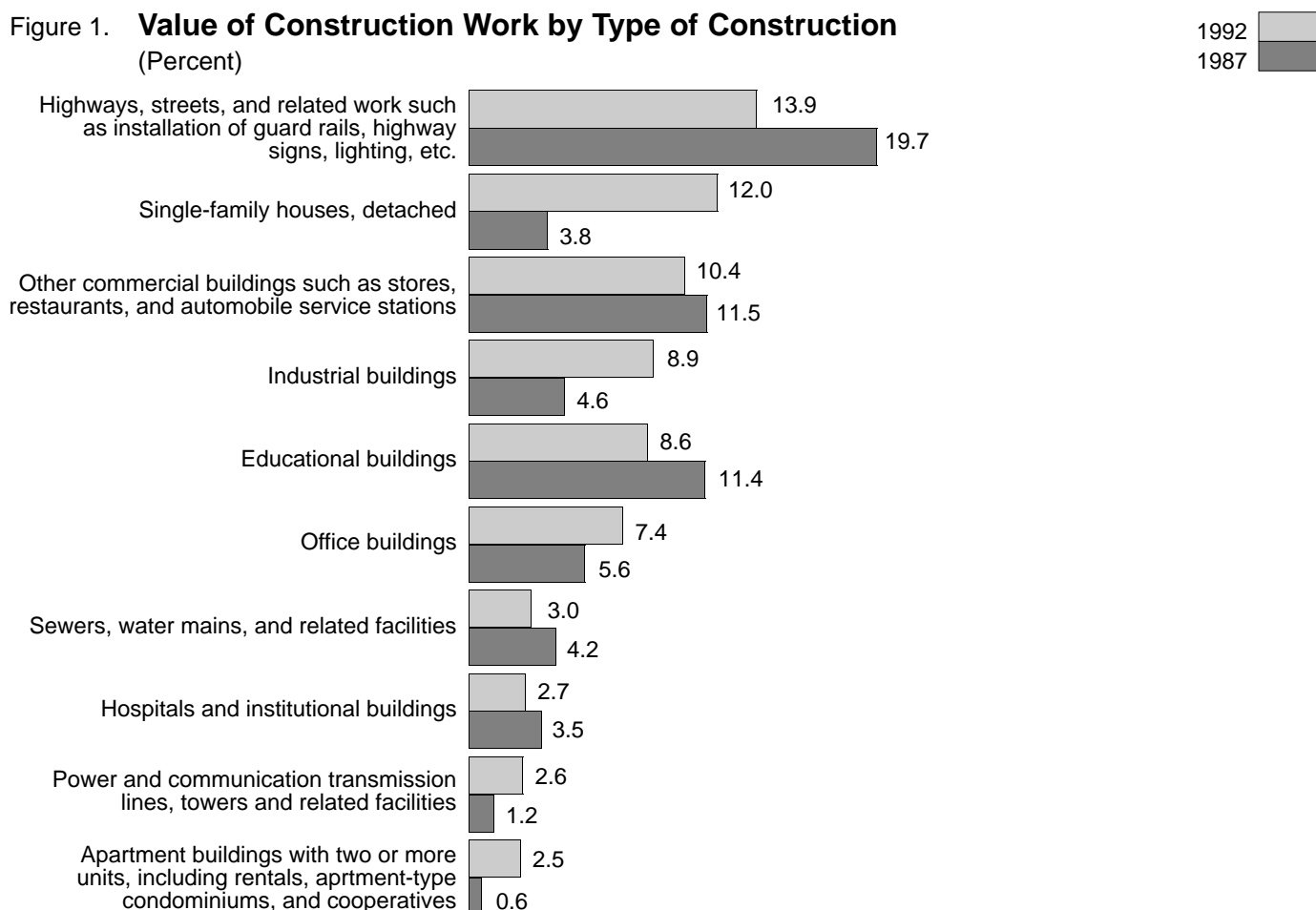


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

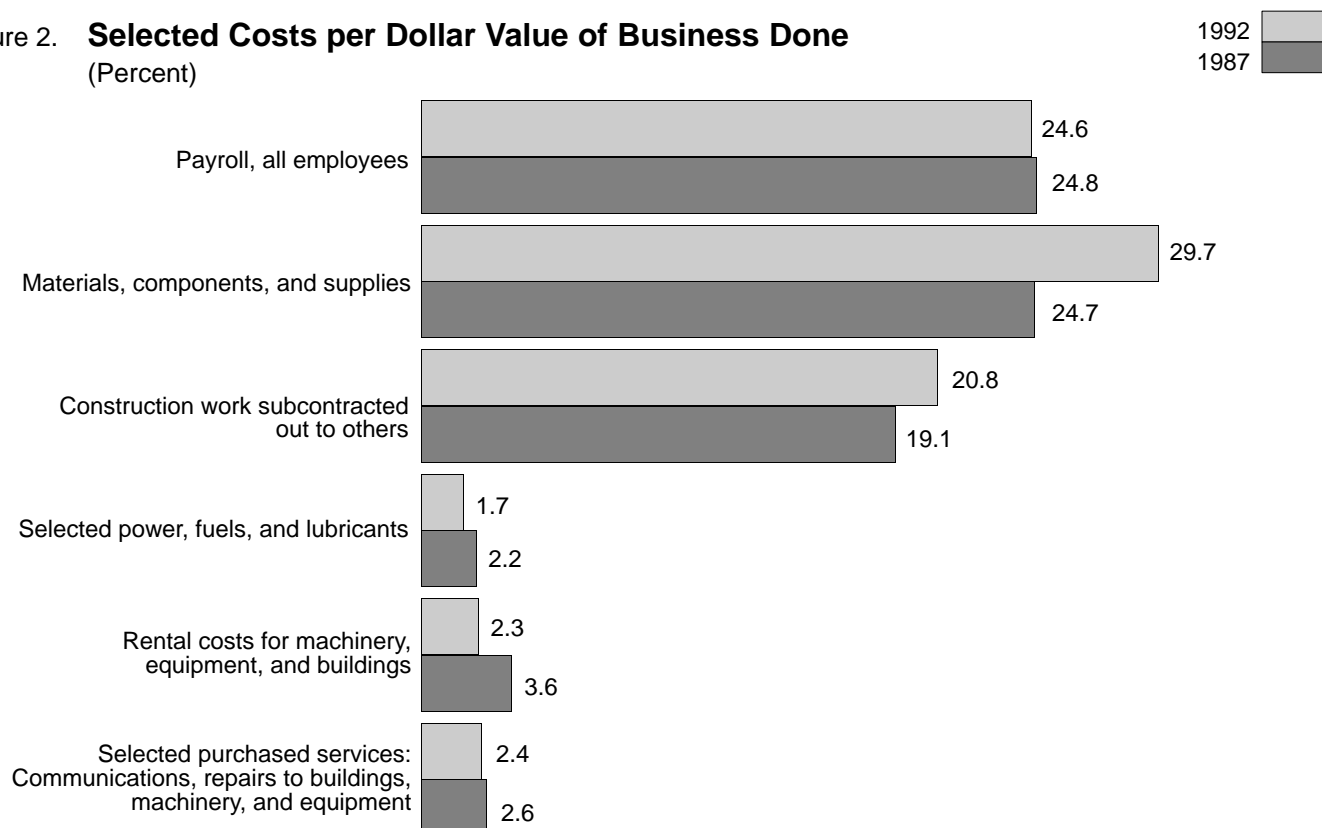


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done ¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	4 537	3 836	12 969	2 013 735	2 861	2 849	87 819	1 676	987	12 969	1 925 916	2	3
15	Building construction—General contractors and operative builders ----	1 034	792	3 970	753 965	487	482	23 895	547	310	3 970	730 070	6	8
16	Heavy construction other than building construction— contractors-----	362	211	3 598	516 469	139	130	7 222	223	81	3 598	509 247	3	3
17	Special trade contractors -----	3 141	2 833	5 401	743 301	2 235	2 237	56 702	906	596	5 401	686 599	3	3
1711	Plumbing, heating, and air-conditioning --	369	317	1 112	173 380	194	197	7 127	175	120	1 112	166 253	6	6
1731	Electrical work-----	303	208	1 309	161 709	127	120	3 727	176	(S)	1 309	157 982	6	5
	1987													
15, 16, 17	Construction industries ² -----	5 227	4 115	12 764	1 888 839	3 720	3 720	162 292	1 507	395	12 764	1 726 547	2	2
15	Building construction—General contractors and operative builders ----	1 246	855	4 440	703 729	838	769	52 073	408	86	4 440	651 656	5	4
16	Heavy construction other than building construction— contractors-----	364	183	(D)	(D)	142	139	11 933	222	44	(D)	(D)	(D)	(D)
17	Special trade contractors -----	3 423	2 842	(D)	(D)	2 561	2 581	81 880	862	261	(D)	(D)	(D)	(D)
1711	Plumbing, heating, and air-conditioning --	402	246	871	116 236	229	228	9 295	173	18	871	106 941	8	8
1731	Electrical work-----	308	211	917	108 355	161	155	5 960	147	56	917	102 395	5	5

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers", SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	1 676	12 969	10 180	473 335	352 775	1 876 384	1 476 131	922 167
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	350	1 110	811	20 521	14 597	125 146	89 039	51 222
1522	Other residential buildings -----	6	242	190	8 537	5 698	36 728	26 226	22 113
1531	Operative builders -----	25	118	*71	2 015	776	31 556	15 403	(S)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	32	904	778	27 638	19 005	152 541	99 355	70 198
1542	Nonresidential buildings, n.e.c. -----	135	1 597	1 161	69 834	46 712	376 945	217 519	134 645
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	113	1 722	1 457	79 819	66 563	304 910	255 155	124 784
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	4	118	83	6 048	4 307	25 059	22 873	(D)
1623	Water, sewer, and utility lines -----	37	928	760	37 529	27 105	90 218	84 868	69 496
1629	Heavy construction, n.e.c. -----	70	830	693	24 707	18 230	74 449	(D)	59 128
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	175	1 112	783	38 402	26 096	163 572	130 690	69 245
1721	Painting and paper hanging -----	105	437	372	9 852	7 904	30 462	28 204	21 092
1731	Electrical work -----	176	1 309	1 009	50 465	38 307	156 688	148 182	92 815
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	19	(D)	47	1 065	(D)	6 338	6 130	2 901
1742	Plastering, drywall, and insulation work -----	50	284	224	10 548	8 632	32 588	31 564	12 959
1743	Terrazzo, tile, marble, and mosaic work -----	6	15	11	474	405	1 316	(D)	836
175	Carpentry and floor work:								
1751	Carpentry -----	76	194	166	4 292	3 697	12 883	11 158	7 057
1752	Floor laying and other floor work -----	30	76	57	2 283	1 693	10 644	9 952	5 005
1761	Roofing, siding, and sheet metal work -----	55	284	239	10 517	8 372	37 321	35 480	19 068
1771	Concrete work -----	43	258	222	8 385	*7 479	*31 038	25 938	14 620
1781	Water well drilling -----	15	33	27	(D)	397	(D)	(D)	(D)
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	12	119	83	7 829	5 101	26 158	(D)	(D)
1793	Glass and glazing work -----	5	55	32	1 628	848	4 015	(D)	2 029
1794	Excavation work -----	80	394	320	11 202	9 488	66 622	63 486	40 198
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	8	75	55	1 705	1 196	4 585	(D)	3 146
1799	Special trade contractors, n.e.c. -----	49	(D)	(D)	36 449	28 794	69 264	65 873	63 861

¹For 1987, includes data for "Land Subdividers and Developers", SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
603 496	400 253	536 997	44 084	60 955	465 366	12 764	1 680 844	932 139	2	2	4	15, 16, 17
												15
40 150 4 394	36 107 10 502	*6 118 —	980 339	572 905	8 063 1 531	(S) 185	(S) 29 761	(S) 9 926	11 (Z)	11 (Z)	30 (Z)	152 1521 1522
8 472	16 152	(S)	*149	*226	(D)	*29	7 552	1 712	36	36	46	1531
30 725 85 491	53 186 159 426	7 411 11 240	3 094 3 948	2 728 5 204	(S) 32 486	361 2 769	55 960 426 884	25 622 204 992	5 13	6 16	2 12	154 1541 1542
												16
135 163	49 755	35 533	11 498	18 089	172 845	1 803	349 103	216 423	6	4	4	1611
14 239 18 190 (D)	2 186 5 350 (D)	(D) 8 820 (D)	757 4 601 4 393	1 256 9 995 *2 700	11 062 66 690 (D)	(D) 969 1 142	(D) 138 542 109 420	(D) 84 069 68 186	(Z) 2 9	(Z) 2 (D)	(Z) 3 49	162 1622 1623 1629
												17
64 126	32 882	112 553	2 115	1 500	18 388	871	104 971	54 019	6	5	15	1711
7 572	2 259	18 860	240	965	6 304	263	20 807	14 909	10	8	24	1721
56 662	8 506	132 878	3 279	2 672	16 223	917	101 691	64 367	6	5	23	1731
3 412 18 654 (D)	208 1 024 (D)	5 776 29 462 1 249	(S) 413 5	88 *255 (D)	1 137 2 755 (D)	(S) 315 (D)	(S) 27 207 4 331	(S) 20 480 *2 449	(D) 5 (Z)	21 10 (D)	21 52 (D)	174 1741 1742 1743
4 459 5 175	*1 726 693	6 752 5 069	65 128	164 (S)	1 601 (S)	(S) (S)	(S) (S)	(S) (S)	22 6	18 9	39 (S)	175 1751 1752
16 625	1 841	21 673	468	1 129	8 472	215	27 073	14 152	8	9	13	1761
*12 039	*5 100	*23 649	871	835	7 461	264	21 222	12 340	23	38	14	1771
1 347	—	(D)	(D)	(D)	1 674	46	4 372	3 142	5	(D)	(D)	1781
8 310 2 821 23 410 (D) (D) (D)	(D) (D) *3 136 (D) (D) 3 391	16 214 3 573 42 974 — 1 918 25 757	616 208 *2 035 (D) 66 (D)	(D) (D) 4 984 (S) (D) 4 805	3 928 513 34 597 (S) (D) (D)	184 76 (S) (D) 47 545	15 134 (D) (S) (D) 7 220 39 237	11 204 3 237 (S) (D) 5 086 33 716	10 (Z) 17 (D) (Z) (D)	(D) (D) 20 (D) (D) 3	(D) (D) 36 (S) (D) 2	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	1 676	1 507	1 757	1 396	1	3	4	5
Proprietors and working partners	987	395	599	814	3	12	17	10
All employees**	12 969	12 764	22 229	16 855	2	2	1	1
Construction workers:								
March	7 508	8 400	13 771	11 574	3	3	1	1
May	10 517	10 656	17 266	15 139	2	3	2	2
August	12 859	12 124	22 636	17 474	2	3	1	2
November	9 834	9 276	17 189	13 429	3	3	2	2
Average	10 180	10 091	17 824	14 417	2	3	1	1
Other employees:								
March	2 736	2 510	4 336	2 226	3	2	2	3
May	2 742	2 705	(NA)	(NA)	3	3	(NA)	(NA)
August	2 982	2 890	(NA)	(NA)	3	3	(NA)	(NA)
November	2 699	2 586	(NA)	(NA)	3	3	(NA)	(NA)
Average	2 790	2 673	(NA)	(NA)	3	2	(NA)	(NA)
Payroll, all employees	473 335	428 265	534 677	463 639	2	2	1	1
Payroll, construction workers	352 775	307 897	433 377	399 045	2	2	1	1
Payroll, other employees	120 560	120 368	101 300	64 594	3	2	1	1
First quarter payroll, all employees	85 257	87 882	99 917	79 707	2	2	1	1
Fringe benefits, all employees	117 910	107 651	102 914	92 575	2	2	1	1
Legally required expenditures	80 543	77 727	77 750	43 116	3	2	1	1
Voluntary expenditures	37 367	29 923	25 164	49 459	3	2	1	1
Dollar value of business done	1 925 916	1 726 547	2 166 033	1 427 807	3	2	1	1
Value of construction work	1 876 384	1 680 844	2 055 137	1 374 077	3	2	1	1
Value of construction work subcontracted in from others	536 997	303 621	435 134	250 291	5	6	10	(Z)
Other business receipts	49 532	44 604	93 739	53 730	6	6	2	2
Net value of construction†	1 476 131	1 351 935	1 644 925	1 130 233	2	2	1	1
Value added††	922 167	932 139	1 101 841	803 139	2	2	1	1
Selected costs	1 003 749	793 309	1 047 034	617 730	4	3	2	2
Materials, components, and supplies	571 371	426 755	589 248	350 713	3	3	2	2
Construction work subcontracted out to others	400 253	328 908	410 212	243 844	7	3	1	2
Selected power, fuels, and lubricants	32 125	37 644	47 574	23 173	3	2	2	2
Electricity	4 221	3 881	4 542	3 720	7	3	3	3
Natural gas	2 098	1 200	1 022	965	8	4	4	8
Gasoline and diesel fuel	22 537	29 012	39 345	15 491	3	2	3	2
On highway use	13 618	19 617	(NA)	(NA)	4	2	(NA)	(NA)
Off highway use	8 919	9 394	(NA)	(NA)	6	3	(NA)	(NA)
Other, including lubricating oils and greases	3 270	3 550	2 664	3 002	2	6	3	4
Rental cost for machinery, equipment, and buildings	44 084	62 247	49 228	30 406	6	2	4	4
For machinery and equipment	33 358	52 179	40 802	26 018	7	2	5	4
For buildings	10 726	10 068	8 425	4 388	9	6	3	3
Selected purchased services	46 574	44 030	44 148	40 390	3	4	2	4
Communication services	6 853	7 808	6 799	4 193	6	5	2	10
Repairs to buildings and other structures	1 645	1 303	2 722	2 847	11	5	2	3
Repairs to machinery and equipment	38 077	34 918	34 625	33 351	3	4	2	4
Ownership of construction projects:								
Value of construction work	1 876 384	1 680 844	2 055 137	1 374 077	3	2	1	1
Government owned	928 510	1 059 102	790 828	328 154	7	3	2	1
Federal	388 290	374 668	(NA)	(NA)	6	4	(NA)	(NA)
State and local	540 220	684 434	(NA)	(NA)	11	4	(NA)	(NA)
Privately owned	947 874	621 741	1 264 308	1 045 923	5	5	2	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	416 489	308 128	4	5
Capital expenditures, other than land -----	60 955	17 288	4	7
New -----	37 796	9 946	5	5
Used -----	23 159	7 342	5	13
Retirements and disposition of depreciable assets -----	12 077	27 524	10	34
End-of-year gross book value of depreciable assets -----	465 366	297 892	3	3
Depreciation charges during year -----	44 174	31 442	4	5
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	65 887	43 899	10	10
Capital expenditures, other than land -----	9 518	2 154	17	22
New buildings and other structures -----	7 787	1 171	21	19
Used buildings and other structures -----	1 731	*982	4	42
Retirements and disposition of depreciable assets -----	821	507	5	24
End-of-year gross book value of depreciable assets -----	74 584	45 545	11	11
Depreciation charges during year -----	6 649	3 274	6	9
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	350 602	264 229	3	5
Capital expenditures, other than land -----	51 437	15 134	4	5
New machinery and equipment, including automobiles and trucks -----	30 009	8 774	4	5
New automobiles and trucks, intended primarily for highway use -----	5 085	2 451	10	7
Used machinery and equipment, including automobiles and trucks -----	21 428	6 359	6	10
Retirements and disposition of depreciable assets -----	11 256	27 017	11	34
End-of-year gross book value of depreciable assets -----	390 782	252 346	3	3
Depreciation charges during year -----	37 525	28 167	5	5

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	1 676	1
Value of construction work	1 876 384	3
Establishments with inventories:		
Number	561	5
Value of construction work	713 142	9
Inventories ¹ :		
End of 1992, materials and supplies	20 467	9
End of 1991, materials and supplies	18 659	9
Establishments with no inventories:		
Number	628	5
Value of construction work	726 851	3
Establishments not reporting:		
Number	487	6
Value of construction work	436 391	10

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	1 676	987	392	180	87	17	11	3	—	—
All employees** -----	12 969	1 754	2 432	2 382	2 506	1 108	1 776	1 012	—	—
Payroll, all employees -----	473 335	39 879	70 658	89 255	95 320	50 741	69 756	57 727	—	—
Dollar value of business done -----	1 925 916	252 477	281 551	384 992	414 771	216 105	271 133	104 886	—	—
Value of construction work -----	1 876 384	249 220	275 849	375 973	406 898	212 156	269 566	86 722	—	—
Net value of construction work† -----	1 476 131	208 208	230 945	291 402	287 731	161 309	<u>296 536</u>	(D)	—	—
Value added†† -----	922 167	126 149	145 218	179 387	189 035	79 473	<u>202 905</u>	(D)	—	—
Cost of materials, components, supplies, and fuels -----	603 496	85 317	91 429	121 034	106 569	85 785	<u>113 362</u>	(D)	—	—
Cost of construction work subcontracted out to others -----	400 253	41 012	44 904	84 571	119 167	50 847	<u>59 752</u>	(D)	—	—
Rental cost for machinery, equipment, and buildings -----	44 084	3 839	5 061	9 045	10 262	4 198	<u>11 679</u>	(D)	—	—
Capital expenditures, other than land -----	60 955	6 423	4 951	6 222	9 645	7 834	<u>25 881</u>	(D)	—	—
End-of-year gross book value of depreciable assets -----	465 366	58 915	57 265	60 312	70 930	76 832	<u>141 112</u>	(D)	—	—
1987										
All employees** -----	12 764	1 627	1 976	2 312	1 995	1 137	1 435	2 279	(D)	(D)
Value of construction work -----	1 680 844	157 719	244 436	328 337	322 331	<u>383 180</u>	(D)	<u>244 839</u>	(D)	(D)
Value added†† -----	932 139	85 908	125 393	187 014	163 948	94 234	123 469	<u>152 172</u>	(D)	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	2	8	9	10	8	(Z)	(Z)	(Z)	—	—
Net value of construction work† -----	2	9	9	14	4	(Z)	(Z)	(Z)	—	—
Capital expenditures, other than land -----	4	27	18	19	6	(Z)	(Z)	(D)	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	1 676	(S)	(S)	193	421	302	245	230	64	42	34
All employees** -----	12 969	(S)	(S)	279	999	1 115	1 665	2 550	1 112	1 474	3 675
Payroll, all employees -----	473 335	(S)	(S)	3 667	17 196	24 422	45 077	90 243	49 298	60 089	182 290
Dollar value of business done -----	1 925 916	(S)	(S)	14 594	73 000	105 305	175 089	364 905	227 043	292 746	670 033
Value of construction work -----	1 876 384	(S)	(S)	14 389	71 968	102 713	172 073	358 730	217 800	289 831	645 771
Net value of construction work† -----	1 476 131	(S)	(S)	13 256	64 943	92 737	153 426	297 965	170 987	191 342	488 515
Value added†† -----	922 167	(S)	(S)	8 899	39 875	60 701	98 176	180 752	116 259	122 318	293 266
Cost of materials, components, supplies, and fuels -----	603 496	(S)	(S)	(S)	26 100	34 629	58 266	123 389	63 972	71 939	219 511
Cost of construction work subcontracted out to others -----	400 253	(S)	(S)	1 133	(S)	9 975	18 647	60 764	46 813	*98 489	157 256
Rental cost for machinery, equipment, and buildings -----	44 084	(S)	(S)	(S)	887	1 282	2 352	9 681	8 950	5 488	15 166
Capital expenditures, other than land -----	60 955	(S)	(S)	(S)	*2 922	(S)	3 392	7 576	5 495	5 808	33 684
End-of-year gross book value of depreciable assets -----	465 366	(S)	(S)	2 727	18 114	27 541	27 926	95 137	37 189	32 752	223 744
1987											
All employees** -----	12 764	(S)	(S)	243	(S)	(S)	1 742	1 936	1 372	1 211	4 381
Value of construction work -----	1 680 844	(S)	(S)	13 567	(S)	(S)	159 047	258 742	241 963	217 841	658 874
Value added†† -----	932 139	(S)	(S)	8 339	(S)	(S)	89 171	140 584	129 917	129 075	360 934
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	(S)	(S)	21	11	14	10	7	7	17	(Z)
Net value of construction work† -----	2	(S)	(S)	14	11	13	10	8	10	19	(Z)
Capital expenditures, other than land -----	4	(S)	(S)	(S)	53	(S)	20	14	19	9	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Finance, Insurance, and Real Estate Industries.

AK-10 ALASKA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 876 384	1 089 714	415 827	314 736	3	5	4	3
Building construction	1 194 345	752 578	289 626	152 141	4	7	4	5
Single-family houses	251 393	155 825	55 372	40 197	7	10	10	13
Single-family houses, detached	225 076	144 768	45 340	34 968	7	10	11	14
Single-family houses, attached, including townhouses and townhouse-type condominiums	26 317	(S)	10 031	5 229	22	(S)	12	17
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	46 750	17 810	11 565	17 374	9	19	17	6
Other residential buildings, including hotels, motels, and tourist cabins	43 609	35 323	6 541	1 745	6	7	13	13
Office buildings	139 733	54 839	45 049	39 845	6	15	7	2
Other commercial buildings such as stores, restaurants, and automobile service stations	195 509	136 413	42 279	16 817	21	31	8	14
Industrial buildings and warehouses	201 747	135 168	48 542	18 037	8	8	8	21
Industrial buildings	167 670	112 407	40 431	14 832	7	6	8	25
Warehouses	34 077	22 761	8 110	3 205	23	26	24	10
Educational buildings	162 153	118 552	36 918	6 684	20	27	13	8
Hospitals and institutional buildings	50 767	27 387	18 731	4 649	4	6	7	8
Amusement, social, and recreational buildings, indoors	*42 019	*35 652	(D)	(D)	61	72	(D)	(D)
Other nonresidential buildings	60 665	35 610	(D)	(D)	17	24	(D)	(D)
Nonbuilding construction	625 932	337 136	126 200	162 596	2	3	7	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	261 009	152 194	61 102	47 713	4	5	11	6
Airport runways and related work	38 213	23 191	9 320	5 702	1	(Z)	3	5
Bridges, tunnels, and elevated highways	25 089	21 408	1 326	2 354	6	7	7	5
Harbor and port facilities	13 536	(D)	1 933	(D)	16	(D)	16	(D)
Conservation and development construction	30 218	(D)	9 061	(D)	9	(D)	21	(D)
Power and communication transmission lines, towers, and related facilities	48 981	(D)	5 774	(D)	6	(D)	29	(D)
Sewers, water mains, and related facilities	57 228	41 061	9 500	6 667	7	10	3	11
Sewers, sewer lines, septic systems, and related facilities	33 765	24 035	5 152	4 579	12	16	3	16
Water mains and related facilities	23 463	17 026	4 348	2 088	3	3	3	7
Sewage treatment and water treatment plants	14 524	7 209	(S)	—	38	8	(S)	—
Other nonbuilding construction	137 134	33 041	20 869	83 224	3	7	7	3
Construction work, n.s.k.	56 107	(NA)	(NA)	(NA)	12	(NA)	(NA)	(NA)
1987								
Value of construction work	1 680 844	1 041 287	361 296	141 398	2	2	6	7
Building construction	884 650	550 188	264 751	69 711	3	3	7	10
Single-family houses	99 231	64 660	23 543	11 027	8	10	14	15
Single-family houses, detached	63 913	(D)	19 997	(D)	11	(D)	15	(D)
Single-family houses, attached, including townhouses and townhouse-type condominiums	35 318	(D)	3 546	(D)	5	(D)	36	(D)
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	9 567	3 182	4 743	1 642	20	5	39	10
Other residential buildings, including hotels, motels, and tourist cabins	58 021	26 925	23 437	7 658	5	8	5	19
Office buildings	94 392	38 470	43 960	11 961	10	19	11	16
Other commercial buildings such as stores, restaurants, and automobile service stations	193 766	152 708	26 322	14 734	5	3	21	23
Industrial buildings and warehouses	119 820	78 337	32 257	9 224	6	8	7	32
Industrial buildings	78 042	50 824	19 583	7 634	8	11	8	39
Warehouses	41 778	27 513	12 674	1 590	6	5	14	17
Educational buildings	191 520	127 972	56 531	7 016	8	2	28	20
Hospitals and institutional buildings	59 653	30 790	26 760	2 102	11	12	21	9
Amusement, social, and recreational buildings, indoors	8 903	6 044	1 570	1 288	11	11	31	25
Other nonresidential buildings	49 777	21 100	25 628	3 059	9	12	10	9
Nonbuilding construction	659 333	491 099	96 546	71 687	3	3	8	6
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	331 236	255 196	45 420	30 620	4	5	9	7
Airport runways and related work	5 749	*2 165	(D)	(D)	19	51	(D)	(D)
Bridges, tunnels, and elevated highways	15 385	15 226	(D)	(D)	(Z)	(Z)	(D)	(D)
Harbor and port facilities	32 533	28 237	1 734	*2 561	7	4	28	47
Power and communication transmission lines, towers, and related facilities	19 398	9 540	7 388	2 469	6	6	12	7
Sewers, water mains, and related facilities	69 920	49 703	15 418	4 798	10	11	27	19
Sewers, sewer lines, septic systems, and related facilities	34 980	21 377	9 372	4 229	8	8	22	21
Water mains and related facilities	34 940	28 326	6 046	569	13	14	34	7
Other nonbuilding construction	185 112	176 636	35 622	31 757	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	136 859	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	1 676	10 180	7 508	10 517	12 859	9 834	1	2	3	2	2	3
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	350	811	604	814	1 039	787	6	12	15	13	12	13
1522	Other residential buildings -----	6	190	167	234	193	167	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1531	Operative builders -----	25	*71	*68	*66	*89	*63	34	54	47	47	51	50
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	32	778	377	862	1 023	850	16	4	6	3	7	4
1542	Nonresidential buildings, n.e.c. -----	135	1 161	869	969	1 494	1 314	12	14	15	13	17	17
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	113	1 457	957	1 738	2 182	951	13	6	10	6	4	9
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	4	83	96	84	85	66	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	37	760	684	719	898	738	10	2	2	2	2	2
1629	Heavy construction, n.e.c. -----	70	693	223	847	884	817	15	9	17	10	8	10
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	175	783	693	745	885	807	6	6	8	7	6	7
1721	Painting and paper hanging -----	105	372	218	433	584	255	11	11	17	13	13	14
1731	Electrical work -----	176	1 009	848	975	1 236	975	4	6	7	7	7	5
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	19	47	26	60	67	35	(Z)	9	24	10	11	17
1742	Plastering, drywall, and insulation work -----	50	224	251	180	178	285	11	5	6	6	7	6
1743	Terrazzo, tile, marble, and mosaic work -----	6	11	11	12	10	12	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
175	Carpentry and floor work:												
1751	Carpentry -----	76	166	113	155	199	198	16	23	23	23	21	20
1752	Floor laying and other floor work -----	30	57	36	59	(S)	68	12	8	9	15	(S)	4
1761	Roofing, siding, and sheet metal work -----	55	239	218	248	296	193	5	9	10	10	7	11
1771	Concrete work -----	43	222	(D)	243	324	(D)	20	26	(D)	25	24	(D)
1781	Water well drilling -----	15	27	21	23	31	31	(Z)	6	(Z)	(Z)	5	10
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	12	83	62	71	95	105	17	10	6	11	10	9
1793	Glass and glazing work -----	5	32	28	30	34	35	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1794	Excavation work -----	80	320	215	369	423	274	19	18	20	17	15	22
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	8	55	44	47	58	70	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1799	Special trade contractors, n.e.c. -----	49	(D)	499	(D)	(D)	553	22	(D)	4	(D)	(D)	5

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	7.7	36.5	184.3	.252	.322	.213	.286	.023
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.2	18.5	154.3	.164	.321	.289	*.049	.008
1522	Other residential buildings -----	40.3	35.3	193.3	.232	.120	.286	—	.009
1531	Operative builders -----	4.8	17.1	*444.4	.064	.268	.512	(S)	.005
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	28.6	30.6	196.1	.181	.201	.349	.049	.020
1542	Nonresidential buildings, n.e.c. -----	11.8	43.7	324.7	.185	.227	.423	.030	.010
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	15.2	46.4	209.3	.262	.443	.163	.117	.038
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	29.5	51.3	301.9	.241	.568	.087	(D)	.030
1623	Water, sewer, and utility lines -----	25.3	40.4	118.7	.416	.202	.059	.098	.051
1629	Heavy construction, n.e.c. -----	11.9	29.8	107.4	.332	(D)	(D)	(D)	.059
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	6.3	34.5	208.9	.235	.392	.201	.688	.013
1721	Painting and paper hanging -----	4.1	22.5	81.9	.323	.249	.074	.619	.008
1731	Electrical work -----	7.4	38.6	155.3	.322	.362	.054	.848	.021
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	(D)	(D)	134.9	.168	.538	.033	.911	(S)
1742	Plastering, drywall, and insulation work -----	5.7	37.1	145.5	.324	.572	.031	.904	.013
1743	Terrazzo, tile, marble, and mosaic work -----	2.5	31.6	119.6	.360	(D)	(D)	.949	.004
175	Carpentry and floor work:								
1751	Carpentry -----	2.6	22.1	77.6	.333	.346	.134	.524	.005
1752	Floor laying and other floor work -----	2.6	30.0	186.7	.214	.486	.065	.476	.012
1761	Roofing, siding, and sheet metal work -----	5.1	37.0	156.2	.282	.445	.049	.581	.013
1771	Concrete work -----	6.0	32.5	139.8	.270	.388	.164	.762	.028
1781	Water well drilling -----	2.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	9.8	65.8	315.2	.299	.318	(D)	.620	.024
1793	Glass and glazing work -----	11.0	29.6	125.5	.405	.703	(D)	.890	.052
1794	Excavation work -----	4.9	28.4	208.2	.168	.351	.047	.645	*.031
1795	Wrecking and demolition work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	9.4	22.7	83.4	.372	(D)	(D)	.418	.014
1799	Special trade contractors, n.e.c. -----	(D)	(D)	(D)	.526	(D)	.049	.372	(D)

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Not applicable]

Contents

California

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for California. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 199,084 establishments in this State operating in the construction industries. These establishments accounted for \$70.2 billion in total dollar value of business done.

Most of the 199,084 construction establishments were small. Of the total, 134,981 were nonemployers, and over half of the employer establishments had less than 5 employees. The 23,006 construction establishments with 5 employees or more, while representing only 12 percent of all establishments, accounted for more than 82 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$65.3 billion in total dollar value of business done. Of this amount, \$64.3 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$17.9 billion, leaving net value of construction work of \$46.4 billion. In addition, these establishments paid out \$20.7 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$28.9 billion. (See Introduction and appendixes for explanation of terms.)

There were 64,103 establishments with total employment averaging 511,115 during the year. Total payroll for 1992 was \$14.2 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 134,981 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$4.9 billion. Most of these establishments, about 75 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

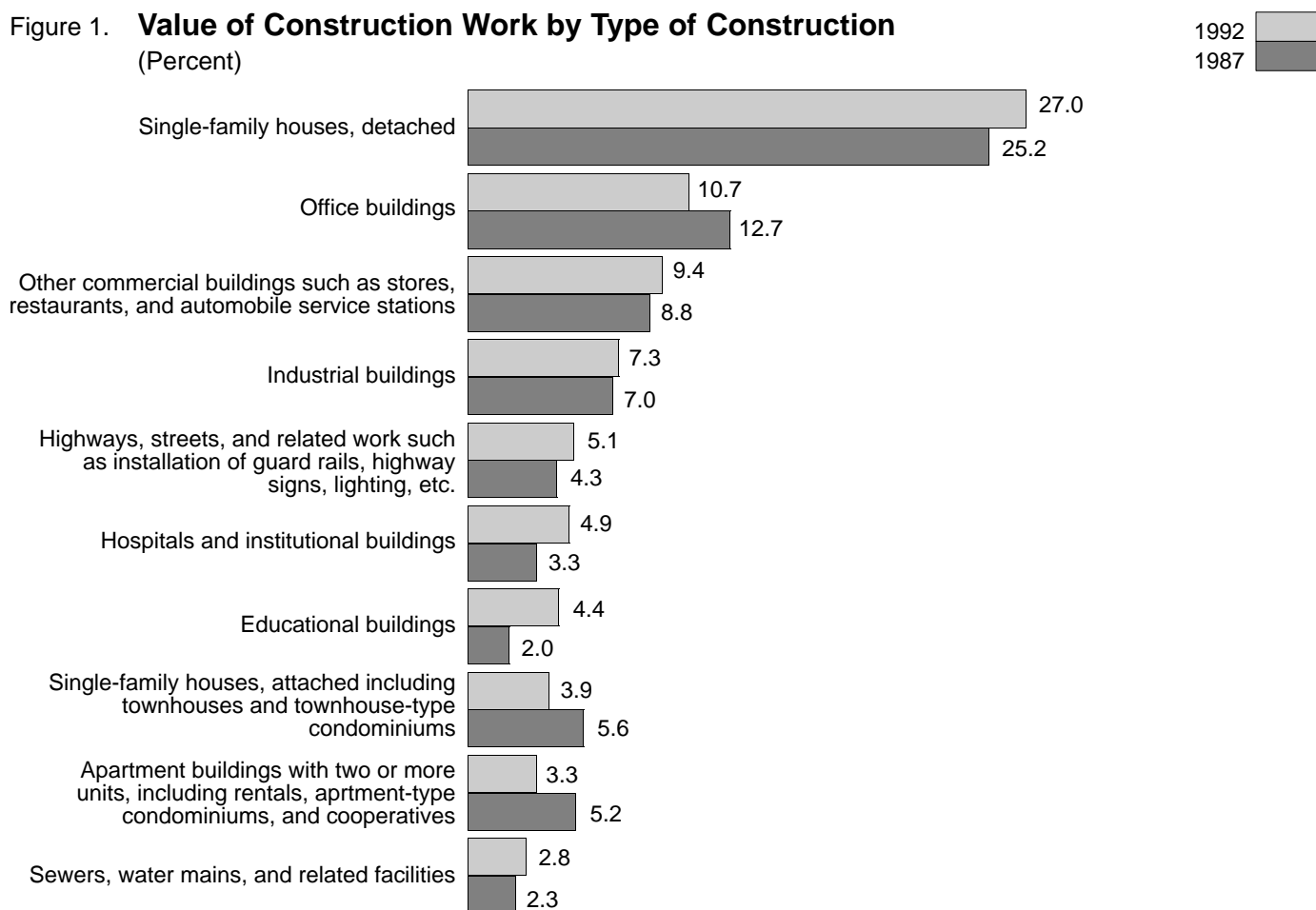


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

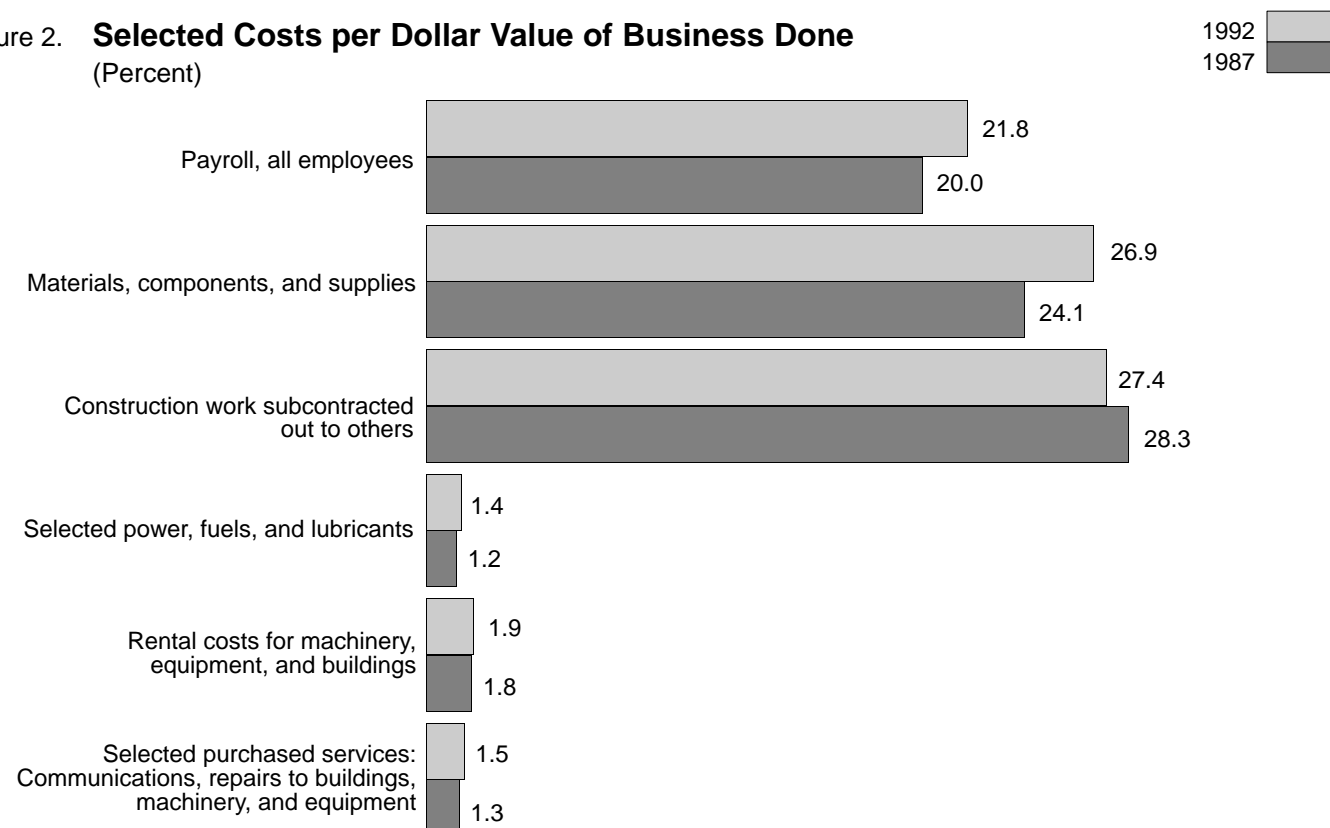


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done¹		Proprie- tors and working partners	All em- ployees**	Dollar value of business done		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	199 084	177 747	511 115	70 167 312	134 981	135 789	4 893 428	64 103	41 958	511 115	65 273 884	(Z)	(Z)
15	Building construction—General contractors and operative builders ----	52 880	45 830	122 670	29 913 248	31 961	31 815	2 003 374	20 919	14 015	122 670	27 909 874	1	1
16	Heavy construction other than building construction—contractors -----	5 005	3 256	67 260	9 456 831	1 893	1 851	85 150	3 112	1 405	67 260	9 371 681	1	1
17	Special trade contractors -----	141 200	128 660	321 185	30 797 233	101 127	102 123	2 804 904	40 073	26 537	321 185	27 992 329	(Z)	(Z)
1711	Plumbing, heating, and air-conditioning --	16 764	13 900	55 569	6 356 422	9 766	9 898	345 485	6 998	4 002	55 569	6 010 937	1	1
1731	Electrical work-----	15 874	13 217	50 159	5 131 095	9 797	9 854	274 252	6 077	3 363	50 159	4 856 843	1	1
	1987													
15, 16, 17	Construction industries² -----	204 342	163 099	598 320	87 984 753	145 292	145 359	13 286 669	59 050	17 740	598 320	74 698 084	(Z)	(Z)
15	Building construction—General contractors and operative builders ----	52 640	37 960	145 185	37 689 004	34 380	33 076	3 700 257	18 260	4 884	145 185	33 988 747	1	1
16	Heavy construction other than building construction—contractors -----	4 921	2 480	74 083	9 609 148	1 820	1 820	261 310	3 101	660	74 083	9 347 838	1	1
17	Special trade contractors -----	141 376	117 319	372 341	34 299 396	104 930	105 370	4 588 895	36 446	11 949	372 341	29 710 501	(Z)	(Z)
1711	Plumbing, heating, and air-conditioning --	15 263	11 012	64 720	6 571 059	8 931	8 961	512 219	6 332	2 051	64 720	6 058 840	1	1
1731	Electrical work-----	14 903	10 961	57 797	5 362 612	9 150	9 139	426 537	5 753	1 822	57 797	4 936 075	1	1

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	64 103	511 115	388 254	14 227 394	9 814 596	64 256 118	46 350 107	28 913 937
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	13 950	52 093	38 821	1 032 300	701 612	6 152 771	4 075 376	2 426 051
1522	Other residential buildings -----	963	6 301	4 630	144 755	92 554	1 073 011	614 677	329 950
1531	Operative builders -----	1 634	16 813	6 690	548 305	151 837	6 664 893	3 537 402	2 410 760
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	885	8 595	5 916	278 757	164 319	1 843 354	816 550	473 034
1542	Nonresidential buildings, n.e.c. -----	3 487	38 868	25 780	1 371 144	791 350	11 654 025	4 346 889	2 735 470
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	896	15 532	11 925	578 104	399 164	2 728 254	2 081 139	1 156 590
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	50	2 255	1 809	101 186	79 146	592 300	357 290	186 155
1623	Water, sewer, and utility lines -----	999	17 666	14 358	602 630	451 583	2 296 243	2 011 366	1 289 149
1629	Heavy construction, n.e.c. -----	1 166	31 808	25 005	1 023 383	751 401	3 567 539	2 848 798	1 982 123
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	6 998	55 569	40 972	1 786 647	1 253 096	5 956 333	5 498 412	3 357 578
1721	Painting and paper hanging -----	4 099	19 574	16 304	409 128	315 842	1 163 246	1 108 605	789 780
1731	Electrical work -----	6 077	50 159	37 866	1 559 249	1 115 200	4 813 283	4 557 223	2 734 326
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	1 629	10 346	8 832	213 457	169 362	715 033	673 816	436 920
1742	Plastering, drywall, and insulation work -----	3 254	34 818	29 853	858 702	686 094	2 288 999	2 149 839	1 415 408
1743	Terrazzo, tile, marble, and mosaic work -----	1 435	7 868	6 330	188 236	139 936	573 716	556 765	333 910
175	Carpentry and floor work:								
1751	Carpentry -----	3 395	26 272	21 685	581 781	444 193	2 056 278	1 898 900	1 128 125
1752	Floor laying and other floor work -----	1 434	8 726	6 558	205 292	139 384	801 215	735 407	400 930
1761	Roofing, siding, and sheet metal work -----	2 864	24 875	19 591	547 442	375 541	2 052 794	1 941 158	1 112 002
1771	Concrete work -----	3 017	25 854	21 565	641 284	485 989	2 222 462	1 963 081	1 191 770
1781	Water well drilling -----	226	2 446	1 851	73 278	51 169	270 583	256 756	163 608
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	468	7 611	5 937	235 707	170 704	761 286	713 583	421 506
1793	Glass and glazing work -----	709	4 114	2 691	118 872	73 190	414 964	406 991	219 145
1794	Excavation work -----	850	6 630	5 346	193 494	141 878	765 368	664 406	455 282
1795	Wrecking and demolition work -----	136	1 864	1 432	47 151	32 832	170 706	144 846	126 863
1796	Installing building equipment, n.e.c. -----	341	7 837	6 153	249 485	187 556	671 462	640 414	468 055
1799	Special trade contractors, n.e.c. -----	3 141	26 621	20 354	637 627	449 663	1 986 000	1 750 419	1 169 449

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
18 453 936	17 906 010	20 642 834	1 255 817	651 010	7 039 070	598 320	71 177 525	32 876 569	(Z)	(Z)	2	15, 16, 17
												15
1 744 030	2 077 396	257 240	74 688	47 466	406 963	50 427	5 467 742	2 241 792	2	2	6	152
296 374	458 334	71 425	7 258	7 751	43 935	10 971	2 011 150	560 032	4	4	14	1521
1 376 801	3 127 491	105 065	32 019	16 300	336 487	23 367	9 709 500	3 345 739	1	2	8	1531
382 425	1 026 804	221 449	28 811	10 987	100 383	11 169	2 643 336	761 244	4	3	10	154
1 737 819	7 307 136	272 308	102 897	47 411	445 597	49 251	11 875 924	2 983 346	1	1	4	1541
												1542
												16
979 020	647 115	657 107	151 216	53 078	796 443	18 748	2 975 885	1 591 856	2	1	9	1611
179 593	235 010	124 739	21 128	11 658	94 222	1 940	301 677	153 566	2	1	4	162
743 007	284 877	580 060	89 011	61 608	617 380	19 119	2 101 952	1 238 137	2	1	5	1622
970 302	718 741	650 457	126 160	69 607	890 081	34 276	3 727 902	2 142 609	1	1	5	1623
												1629
												17
2 195 438	457 921	3 789 213	116 356	73 581	630 504	64 720	5 975 639	3 365 458	1	1	4	1711
319 411	54 642	676 339	24 787	17 280	120 960	21 370	1 144 368	836 719	2	2	9	1721
1 866 458	256 059	3 028 065	93 005	50 584	491 248	57 797	4 866 723	2 864 117	1	1	7	1731
240 717	41 216	523 254	(S)	8 189	74 803	12 609	870 706	501 296	3	2	13	174
752 487	139 160	2 021 409	37 884	22 437	202 442	48 672	3 127 372	1 969 177	1	1	8	1741
227 659	16 951	526 914	8 646	6 113	76 101	7 465	529 857	319 898	3	2	15	1742
												1743
795 885	157 378	1 615 489	35 840	18 220	171 962	33 297	2 282 195	1 236 429	2	2	8	175
352 984	65 808	498 322	12 443	6 933	50 771	6 615	623 028	314 083	3	3	12	1751
												1752
852 039	111 636	820 549	33 092	20 927	210 111	27 289	1 907 960	1 109 870	2	2	6	1761
780 285	259 381	1 568 896	50 313	26 569	345 119	33 363	2 781 887	1 518 217	2	2	8	1771
98 753	13 827	37 755	6 985	8 012	108 026	1 598	147 661	90 038	3	2	7	1781
302 543	47 703	641 368	21 036	7 802	95 206	8 769	833 529	508 363	2	2	14	179
215 934	7 973	319 098	11 922	3 416	43 741	6 474	572 626	307 226	4	3	17	1791
218 490	100 963	428 083	73 138	14 396	277 585	9 607	1 204 038	852 454	4	3	6	1793
24 871	25 860	75 612	*13 227	2 681	46 792	2 572	132 149	113 285	5	7	32	1794
178 865	31 048	204 526	17 495	5 910	65 071	5 441	523 790	376 610	2	1	2	1795
621 747	235 581	928 091	49 967	32 093	297 140	24 683	1 733 578	1 068 146	2	2	8	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	64 103	59 050	46 693	44 691	(Z)	(Z)	1	1
Proprietors and working partners	41 958	17 740	19 234	29 075	1	2	2	2
All employees**	511 115	598 320	443 349	424 397	(Z)	(Z)	(Z)	(Z)
Construction workers:								
March	375 920	441 938	328 571	307 154	(Z)	(Z)	(Z)	(Z)
May	394 143	465 210	333 996	332 671	(Z)	(Z)	1	1
August	409 834	491 068	336 704	348 708	(Z)	(Z)	1	1
November	373 118	469 683	328 727	341 022	(Z)	(Z)	1	1
Average	388 254	466 975	336 885	332 667	(Z)	(Z)	(Z)	(Z)
Other employees:								
March	125 590	129 435	105 325	88 635	(Z)	1	(Z)	1
May	122 549	130 850	(NA)	(NA)	(Z)	1	(NA)	(NA)
August	122 367	132 931	(NA)	(NA)	(Z)	1	(NA)	(NA)
November	120 941	132 189	(NA)	(NA)	(Z)	1	(NA)	(NA)
Average	122 862	131 351	(NA)	(NA)	(Z)	(Z)	(NA)	(NA)
Payroll, all employees	14 227 394	14 905 469	10 038 911	6 674 014	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	9 814 596	10 567 484	7 237 465	4 878 204	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	4 412 799	4 337 985	2 801 446	1 795 810	(Z)	(Z)	(Z)	1
First-quarter payroll, all employees	3 305 605	3 361 379	2 336 909	1 473 035	(Z)	(Z)	(Z)	(Z)
Fringe benefits, all employees	3 767 141	3 742 380	1 928 342	1 691 635	(Z)	(Z)	(Z)	(Z)
Legally required expenditures	2 378 988	2 505 330	1 364 446	775 637	(Z)	(Z)	(Z)	(Z)
Voluntary expenditures	1 388 152	1 237 049	563 895	915 998	(Z)	(Z)	(Z)	(Z)
Dollar value of business done	65 273 884	74 698 084	43 276 336	30 514 878	(Z)	(Z)	(Z)	(Z)
Value of construction work	64 256 118	71 177 525	40 579 275	28 640 520	(Z)	(Z)	(Z)	(Z)
Value of construction work subcontracted in from others	20 642 834	19 718 875	9 656 495	7 878 163	1	1	1	(Z)
Other business receipts	1 017 766	1 700 952	2 078 498	1 874 359	2	1	(Z)	1
Net value of construction†	46 350 107	50 071 124	28 828 153	20 372 929	(Z)	(Z)	(Z)	(Z)
Value added††	28 913 937	32 876 569	19 628 452	12 825 518	(Z)	(Z)	(Z)	(Z)
Selected costs	36 359 947	40 001 903	23 029 322	16 894 229	(Z)	1	(Z)	(Z)
Materials, components, and supplies	17 557 968	17 979 694	10 603 707	8 168 104	(Z)	(Z)	(Z)	(Z)
Construction work subcontracted out to others	17 906 010	21 106 400	11 751 122	8 267 591	1	1	(Z)	1
Selected power, fuels, and lubricants	895 969	915 807	674 492	458 535	1	1	(Z)	1
Electricity	160 654	134 202	92 721	55 969	1	1	1	1
Natural gas	40 950	29 090	26 171	30 697	2	2	1	2
Gasoline and diesel fuel	652 284	692 365	507 100	307 260	1	1	1	1
On highway use	505 873	523 564	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	146 411	168 800	(NA)	(NA)	1	1	(NA)	(NA)
Other, including lubricating oils and greases	42 080	60 149	48 500	64 636	2	1	1	1
Rental cost for machinery, equipment, and buildings	1 255 817	1 327 711	684 686	443 823	1	1	1	1
For machinery and equipment	798 009	953 194	483 490	359 914	1	1	1	1
For buildings	457 808	374 516	201 196	83 909	1	1	1	1
Selected purchased services	998 203	945 870	558 197	417 366	1	1	1	2
Communication services	357 354	308 243	190 204	135 701	1	1	1	6
Repairs to buildings and other structures	55 420	56 811	33 191	26 350	2	3	2	3
Repairs to machinery and equipment	585 428	580 815	334 801	255 315	1	1	1	1
Ownership of construction projects:								
Value of construction work	64 256 118	71 177 525	40 579 275	28 640 520	(Z)	(Z)	(Z)	(Z)
Government owned	14 663 749	10 451 942	7 095 289	4 530 809	1	1	1	(Z)
Federal	2 970 648	2 950 407	(NA)	(NA)	2	3	(NA)	(NA)
State and local	11 693 101	7 501 534	(NA)	(NA)	1	1	(NA)	(NA)
Privately owned	49 592 369	60 725 583	33 483 986	24 109 710	1	1	(Z)	(Z)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	6 804 457	5 857 281	1	1
Capital expenditures, other than land -----	651 010	898 871	2	1
New -----	481 256	713 766	2	2
Used -----	169 754	185 104	4	3
Retirements and disposition of depreciable assets -----	416 396	388 499	3	3
End-of-year gross book value of depreciable assets -----	7 039 070	6 367 653	1	1
Depreciation charges during year -----	777 594	765 057	1	1
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	1 010 128	1 597 044	2	3
Capital expenditures, other than land -----	72 345	173 043	4	5
New buildings and other structures -----	53 811	131 388	5	6
Used buildings and other structures -----	18 534	41 655	10	9
Retirements and disposition of depreciable assets -----	42 274	106 408	9	8
End-of-year gross book value of depreciable assets -----	1 040 199	1 663 680	2	3
Depreciation charges during year -----	84 194	132 242	5	3
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	5 794 329	4 260 236	1	1
Capital expenditures, other than land -----	578 665	725 827	2	1
New machinery and equipment, including automobiles and trucks -----	427 445	582 378	2	1
New automobiles and trucks, intended primarily for highway use -----	179 240	274 150	2	2
Used machinery and equipment, including automobiles and trucks -----	151 220	143 449	4	2
Retirements and disposition of depreciable assets -----	374 123	282 091	4	3
End-of-year gross book value of depreciable assets -----	5 998 871	4 703 972	1	1
Depreciation charges during year -----	693 399	632 815	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	64 103	(Z)
Value of construction work	64 256 118	(Z)
Establishments with inventories:		
Number	20 502	1
Value of construction work	25 848 176	(Z)
Inventories ¹ :		
End of 1992, materials and supplies	911 379	3
End of 1991, materials and supplies	696 227	2
Establishments with no inventories:		
Number	22 687	1
Value of construction work	25 172 363	1
Establishments not reporting:		
Number	20 914	1
Value of construction work	13 235 578	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	64 103	41 097	11 205	6 713	3 625	997	360	85	16	5
All employees** -----	511 115	72 793	71 717	87 943	106 614	67 174	51 403	28 659	10 582	14 231
Payroll, all employees -----	14 227 394	1 305 480	1 614 172	2 355 439	3 185 113	2 266 736	1 746 219	1 122 800	307 208	324 228
Dollar value of business done -----	65 273 884	8 017 726	7 154 035	9 802 243	13 596 917	10 949 997	8 619 900	5 348 707	1 241 583	542 777
Value of construction work -----	64 256 118	7 915 868	7 031 030	9 639 309	13 415 097	10 815 748	8 453 842	5 270 876	1 218 056	496 291
Net value of construction work† -----	46 350 107	6 257 036	5 502 519	7 204 947	9 860 002	7 262 908	5 400 074	3 384 652	1 084 458	393 511
Value added†† -----	28 913 937	3 634 214	3 404 797	4 487 764	6 135 572	4 587 568	3 383 642	2 249 863	719 974	310 544
Cost of materials, components, supplies, and fuels -----	18 453 936	2 724 680	2 220 727	2 880 118	3 906 249	2 809 589	2 182 490	1 212 620	388 011	129 453
Cost of construction work subcontracted out to others -----	17 906 010	1 658 832	1 528 511	2 434 362	3 555 095	3 552 840	3 053 768	1 886 224	133 598	102 780
Rental cost for machinery, equipment, and buildings -----	1 255 817	132 537	142 570	208 192	267 334	188 398	172 833	106 924	37 030	(D)
Capital expenditures, other than land -----	651 010	123 101	72 704	95 373	131 778	79 961	78 170	63 997	5 926	(D)
End-of-year gross book value of depreciable assets -----	7 039 070	952 379	788 264	1 105 020	1 461 514	947 357	1 079 516	583 027	115 290	6 703
1987										
All employees** -----	598 320	(S)	80 525	100 779	130 026	79 704	74 882	33 458	16 260	16 706
Value of construction work -----	71 177 525	(S)	7 169 023	10 149 370	14 666 745	11 100 443	12 249 285	4 662 800	3 978 589	(D)
Value added†† -----	32 876 569	(S)	3 626 878	4 932 572	7 220 470	5 089 728	5 140 907	2 949 675	(D)	679 979
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	(Z)	1	2	2	1	1	(Z)	(Z)	(Z)	(Z)
Net value of construction work† -----	(Z)	2	2	1	1	(Z)	(Z)	(Z)	(Z)	(Z)
Capital expenditures, other than land -----	2	5	6	4	1	(Z)	(Z)	(Z)	(Z)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	64 103	(S)	(S)	8 623	16 371	11 889	8 360	6 049	2 179	1 130	915
All employees** -----	511 115	(S)	(S)	11 693	41 096	54 152	68 060	93 434	63 562	53 095	118 989
Payroll, all employees -----	14 227 394	(S)	(S)	140 599	612 036	1 031 111	1 513 464	2 532 692	1 936 761	1 835 967	4 558 493
Dollar value of business done -----	65 273 884	(S)	(S)	635 746	2 712 483	4 189 093	5 787 314	9 183 975	7 507 818	7 767 550	27 258 555
Value of construction work -----	64 256 118	(S)	(S)	628 032	2 684 021	4 125 988	5 693 885	9 012 680	7 405 693	7 653 243	26 823 147
Net value of construction work† -----	46 350 107	(S)	(S)	573 605	2 382 934	3 607 920	4 818 399	7 323 658	5 910 107	5 692 994	15 829 030
Value added†† -----	28 913 937	(S)	(S)	352 731	1 436 801	2 171 986	2 919 105	4 554 557	3 663 938	3 546 270	10 142 620
Cost of materials, components, supplies, and fuels -----	18 453 936	(S)	(S)	228 588	974 597	1 499 039	1 992 722	2 940 397	2 348 294	2 261 031	6 121 818
Cost of construction work subcontracted out to others -----	17 906 010	(S)	(S)	(S)	301 086	518 068	875 487	1 689 022	1 495 586	1 960 249	10 994 117
Rental cost for machinery, equipment, and buildings -----	1 255 817	(S)	(S)	12 073	54 227	94 923	122 008	207 726	156 954	146 180	457 637
Capital expenditures, other than land -----	651 010	(S)	(S)	11 199	47 769	72 771	71 997	97 462	75 360	77 975	192 361
End-of-year gross book value of depreciable assets -----	7 039 070	(S)	(S)	97 450	365 860	584 604	745 116	1 142 958	844 340	811 908	2 407 146
1987											
All employees** -----	598 320	(S)	(S)	(S)	(S)	(S)	73 791	109 208	74 328	67 620	146 495
Value of construction work -----	71 177 525	(S)	(S)	(S)	(S)	(S)	5 561 513	9 760 647	8 417 590	8 710 312	31 712 931
Value added†† -----	32 876 569	(S)	(S)	(S)	(S)	(S)	3 012 814	5 189 382	4 247 382	4 187 224	12 302 638
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	(S)	(S)	3	2	2	2	1	1	(Z)	(Z)
Net value of construction work† -----	(Z)	(S)	(S)	3	2	2	2	1	1	(Z)	(Z)
Capital expenditures, other than land -----	2	(S)	(S)	10	7	8	6	4	1	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	64 256 118	40 612 252	14 483 285	7 129 550	(Z)	(Z)	1	1
Building construction	49 780 892	32 535 120	12 395 664	4 850 108	(Z)	(Z)	1	1
Single-family houses	19 891 841	14 608 583	3 578 440	1 704 819	1	1	2	2
Single-family houses, detached	17 379 573	12 764 144	3 216 979	1 398 450	1	1	2	2
Single-family houses, attached, including townhouses and townhouse-type condominiums	2 512 268	1 844 439	361 460	306 369	2	3	5	4
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	2 125 549	1 364 800	409 759	350 991	2	2	4	3
Other residential buildings, including hotels, motels, and tourist cabins	880 085	587 277	200 717	92 091	2	2	5	5
Office buildings	6 878 077	3 606 639	2 494 008	777 429	1	1	1	2
Other commercial buildings such as stores, restaurants, and automobile service stations	6 019 746	3 544 081	1 806 612	669 052	1	1	2	3
Industrial buildings and warehouses	5 827 555	3 351 439	1 712 653	763 464	1	1	2	2
Industrial buildings	4 714 985	2 622 635	1 434 867	657 482	1	1	2	2
Warehouses	1 112 570	728 803	277 785	105 981	2	2	4	3
Religious buildings	511 613	281 675	159 430	70 508	4	4	10	4
Educational buildings	2 839 057	1 896 718	793 052	149 287	1	1	3	3
Hospitals and institutional buildings	3 170 106	2 102 295	889 940	177 872	1	1	3	3
Amusement, social, and recreational buildings, indoors	706 621	549 034	137 986	19 600	2	2	6	4
Other nonresidential buildings	930 641	642 579	213 069	74 994	3	3	5	10
Nonbuilding construction	12 444 195	8 077 132	2 087 621	2 279 442	1	1	1	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	3 285 146	1 928 343	754 441	602 362	1	1	2	2
Outdoor swimming pools	454 671	337 182	58 162	59 327	8	9	12	15
Private driveways and parking areas	431 690	226 462	78 417	126 811	5	5	8	13
Bridges, tunnels, and elevated highways	791 967	625 380	117 732	48 855	1	1	4	9
Conservation and development construction	541 384	366 426	73 444	101 514	3	4	6	4
Power and communication transmission lines, towers, and related facilities	511 378	331 851	86 965	92 563	3	4	6	3
Sewers, water mains, and related facilities	1 814 905	1 410 228	202 926	201 752	2	2	3	4
Sewers, sewer lines, septic systems, and related facilities	896 146	691 046	110 680	94 420	2	3	5	7
Water mains and related facilities	918 760	719 182	92 246	107 332	2	2	3	5
Pipeline construction other than sewer or water lines	688 854	451 322	105 889	131 643	1	2	2	1
Blast furnaces, petroleum refineries, chemical complexes, etc.	900 518	420 724	138 536	341 257	2	3	2	1
Power plants	644 803	269 508	115 043	260 252	1	1	1	1
Sewage treatment and water treatment plants	826 432	633 229	152 906	40 296	1	1	3	4
Other nonbuilding construction	1 552 447	1 076 477	203 160	272 809	2	2	3	4
Construction work, n.s.k.	2 031 031	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
1987								
Value of construction work	71 177 525	51 137 633	11 092 409	5 655 858	(Z)	(Z)	1	1
Building construction	55 348 773	42 037 018	9 261 134	3 673 479	(Z)	1	1	2
Single-family houses	21 948 802	18 302 997	2 434 656	1 211 149	1	1	2	2
Single-family houses, detached	17 964 300	14 817 545	2 131 142	1 015 613	1	1	2	2
Single-family houses, attached, including townhouses and townhouse-type condominiums	3 984 502	3 485 452	303 514	195 536	2	2	5	4
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	3 677 873	3 111 382	232 376	334 114	3	2	4	15
Other residential buildings, including hotels, motels, and tourist cabins	2 376 982	1 904 744	329 113	143 124	2	3	3	3
Office buildings	9 010 112	6 365 558	2 108 198	536 355	1	1	2	2
Other commercial buildings such as stores, restaurants, and automobile service stations	6 288 167	4 295 722	1 402 322	590 123	1	1	2	4
Industrial buildings and warehouses	6 768 175	4 874 848	1 336 618	556 708	1	1	2	2
Industrial buildings	4 979 766	3 413 344	1 102 220	464 202	1	1	2	2
Warehouses	1 788 409	1 461 504	234 398	92 506	2	2	3	4
Religious buildings	303 751	187 714	77 314	38 723	6	10	6	5
Educational buildings	1 435 037	876 430	440 440	118 166	2	1	3	5
Hospitals and institutional buildings	2 359 907	1 581 406	658 611	119 889	1	1	2	5
Amusement, social, and recreational buildings, indoors	228 875	149 398	53 712	25 765	4	6	7	5
Other nonresidential buildings	951 092	679 778	194 445	76 879	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	12 537 124	8 807 656	1 824 605	1 904 863	1	1	2	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	3 082 650	1 760 850	776 394	545 405	1	1	4	2
Outdoor swimming pools	441 078	343 030	65 045	33 003	7	6	14	19
Private driveways and parking areas	601 409	403 509	76 095	121 804	3	3	7	6
Bridges, tunnels, and elevated highways	503 681	411 172	68 681	23 827	1	1	3	5
Conservation and development construction	333 294	263 989	46 538	22 766	6	7	7	10
Power and communication transmission lines, towers, and related facilities	715 922	506 024	69 679	140 219	8	8	3	10
Sewers, water mains, and related facilities	1 667 891	1 371 555	176 900	119 436	2	2	5	4
Sewers, sewer lines, septic systems, and related facilities	869 639	718 790	89 853	60 995	2	2	8	6
Water mains and related facilities	798 252	652 765	87 047	58 441	2	2	3	4
Pipeline construction other than sewer or water lines	542 360	421 642	75 446	45 271	2	3	2	3
Blast furnaces, petroleum refineries, chemical complexes, etc.	774 265	501 417	116 824	156 022	1	(Z)	2	4
Sewage treatment and water treatment plants	650 395	498 773	117 182	34 439	2	2	6	13
Other nonbuilding construction	3 224 179	2 325 695	235 821	662 671	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	3 291 628	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	64 103	388 254	375 920	394 143	409 834	373 118	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	13 950	38 821	37 899	39 478	41 462	36 447	1	2	2	2	2	2
1522	Other residential buildings -----	963	4 630	4 788	5 029	4 851	3 852	6	4	5	5	5	5
1531	Operative builders -----	1 634	6 690	6 538	7 053	7 089	6 080	4	3	3	3	2	3
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	885	5 916	5 654	5 977	6 058	5 974	7	5	5	4	7	5
1542	Nonresidential buildings, n.e.c. ----	3 487	25 780	25 534	25 626	26 823	25 136	3	2	2	2	2	2
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	896	11 925	10 082	12 500	13 441	11 679	5	2	2	2	2	2
162	Heavy construction, except highway: Bridge, tunnel, and elevated												
1622	highway construction -----	50	1 809	1 549	1 747	2 001	1 939	11	1	1	1	2	2
1623	Water, sewer, and utility lines -----	999	14 358	12 837	14 262	15 424	14 909	4	2	2	2	2	2
1629	Heavy construction, n.e.c. -----	1 166	25 005	25 296	24 403	26 033	24 287	5	1	1	1	1	1
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	6 998	40 972	40 715	41 766	42 395	39 012	1	1	1	1	1	1
1721	Painting and paper hanging -----	4 099	16 304	14 947	16 630	18 371	15 266	1	2	2	2	2	2
1731	Electrical work -----	6 077	37 866	37 628	37 241	39 504	37 091	1	1	1	1	1	1
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	1 629	8 832	8 398	9 369	9 252	8 309	2	3	3	3	3	3
1742	Plastering, drywall, and insulation work -----	3 254	29 853	29 134	30 905	30 857	28 517	2	1	2	2	2	2
1743	Terrazzo, tile, marble, and mosaic work -----	1 435	6 330	6 335	6 695	6 418	5 872	3	3	3	3	3	3
175	Carpentry and floor work:												
1751	Carpentry -----	3 395	21 685	20 366	23 238	24 110	19 028	2	2	2	2	2	3
1752	Floor laying and other floor work --	1 434	6 558	6 511	6 608	6 910	6 204	3	3	3	3	3	4
1761	Roofing, siding, and sheet metal work -----	2 864	19 591	18 833	19 164	20 596	19 771	2	2	2	2	2	2
1771	Concrete work -----	3 017	21 565	20 371	22 467	22 642	20 780	2	2	2	2	2	2
1781	Water well drilling -----	226	1 851	1 834	1 857	1 941	1 773	6	3	3	3	3	3
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	468	5 937	5 815	6 049	6 108	5 775	7	2	2	2	3	2
1793	Glass and glazing work -----	709	2 691	2 767	2 697	2 734	2 565	4	4	4	4	4	5
1794	Excavation work -----	850	5 346	4 517	5 574	5 886	5 407	6	4	5	4	4	4
1795	Wrecking and demolition work -----	136	1 432	932	1 588	1 672	1 533	13	5	5	4	5	7
1796	Installing building equipment, n.e.c. -----	341	6 153	6 898	5 730	5 978	6 004	7	2	1	2	2	3
1799	Special trade contractors, n.e.c. ----	3 141	20 354	19 740	20 491	21 278	19 907	3	2	2	2	2	2

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.0	27.8	165.5	.221	.287	.279	.321	.020
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.7	19.8	158.5	.168	.283	.338	.042	.012
1522	Other residential buildings -----	6.5	23.0	231.8	.135	.276	.427	.067	.007
1531	Operative builders -----	10.3	32.6	996.2	.082	.207	.469	.016	.005
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	9.7	32.4	311.6	.151	.207	.557	.120	.016
1542	Nonresidential buildings, n.e.c. -----	11.1	35.3	452.1	.118	.149	.627	.023	.009
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	17.3	37.2	228.8	.212	.359	.237	.241	.055
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	44.7	44.9	327.4	.171	.303	.397	.211	.036
1623	Water, sewer, and utility lines -----	17.7	34.1	159.9	.262	.324	.124	.253	.039
1629	Heavy construction, n.e.c. -----	27.3	32.2	142.7	.287	.272	.201	.182	.035
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	7.9	32.2	145.4	.300	.369	.077	.636	.020
1721	Painting and paper hanging -----	4.8	20.9	71.3	.352	.275	.047	.581	.021
1731	Electrical work -----	8.3	31.1	127.1	.324	.388	.053	.629	.019
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6.4	20.6	81.0	.299	.337	.058	.732	(S)
1742	Plastering, drywall, and insulation work -----	10.7	24.7	76.7	.375	.329	.061	.883	.017
1743	Terrazzo, tile, marble, and mosaic work -----	5.5	23.9	90.6	.328	.397	.030	.918	.015
175	Carpentry and floor work:								
1751	Carpentry -----	7.7	22.1	94.8	.283	.387	.077	.786	.017
1752	Floor laying and other floor work -----	6.1	23.5	122.2	.256	.441	.082	.622	.016
1761	Roofing, siding, and sheet metal work -----	8.7	22.0	104.8	.267	.415	.054	.400	.016
1771	Concrete work -----	8.6	24.8	103.1	.289	.351	.117	.706	.023
1781	Water well drilling -----	10.8	30.0	146.2	.271	.365	.051	.140	.026
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	16.3	31.0	128.2	.310	.397	.063	.842	.028
1793	Glass and glazing work -----	5.8	28.9	154.2	.286	.520	.019	.769	.029
1794	Excavation work -----	7.8	29.2	143.2	.253	.285	.132	.559	.096
1795	Wrecking and demolition work -----	13.7	25.3	119.2	.276	.146	.151	.443	.077
1796	Installing building equipment, n.e.c. -----	23.0	31.8	109.1	.372	.266	.046	.305	.026
1799	Special trade contractors, n.e.c. -----	8.5	24.0	97.6	.321	.313	.119	.467	.025

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	LOS ANGELES–RIVERSIDE–ORANGE COUNTY, CA CMSA											
	Construction industries -----	25 024	228 224	6 252 722	28 494 254	20 459 711	12 903 124	8 061 167	8 034 543	250 903	(Z)	(Z)
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	4 239	17 112	325 419	2 011 129	1 310 005	804 548	533 122	701 123	(S)	3	3
1522	Other residential buildings -----	321	3 071	66 562	540 907	311 841	165 170	153 008	229 066	5 663	5	5
1531	Operative builders -----	510	7 899	271 717	3 401 258	1 672 464	1 194 132	647 146	1 728 795	4 453	1	2
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	426	4 115	132 008	873 962	355 763	209 027	165 772	518 199	3 775	7	4
1542	Nonresidential buildings, n.e.c. -----	1 345	15 904	556 180	5 077 112	1 998 937	1 240 250	817 260	3 078 175	13 846	2	1
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	326	5 747	213 795	1 064 487	818 931	461 665	367 528	245 555	21 150	3	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	16	768	37 578	219 626	(D)	48 695	85 283	(D)	1 850	(Z)	(D)
1623	Water, sewer, and utility lines -----	433	9 128	317 907	1 179 454	1 046 384	674 156	376 823	133 070	31 132	2	2
1629	Heavy construction, n.e.c. -----	486	16 422	453 969	1 557 220	1 194 064	851 769	415 907	363 156	27 642	1	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning -----	3 275	24 650	769 583	2 689 605	2 454 946	1 484 385	991 154	234 659	25 810	1	2
1721	Painting and paper hanging -----	1 468	8 365	172 576	504 533	475 312	347 209	128 300	29 221	6 641	3	3
1731	Electrical work -----	2 767	23 537	732 043	2 241 098	2 118 013	1 271 452	865 437	123 085	18 416	2	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work -----	718	(S)	119 623	399 133	380 265	255 357	127 202	18 868	4 262	(S)	3
1742	Plastering, drywall, and insulation work -----	1 273	15 168	366 093	958 513	895 688	583 093	326 021	62 825	8 085	2	2
1743	Terrazzo, tile, marble, and mosaic work -----	486	3 131	77 033	230 900	222 003	138 872	86 001	8 897	1 678	4	3
175	Carpentry and floor work:											
1751	Carpentry -----	1 504	13 571	285 188	992 975	925 844	529 324	410 008	67 131	8 127	3	2
1752	Floor laying and other floor work -----	544	3 653	86 955	328 608	303 585	170 623	141 124	25 023	(S)	4	4
1761	Roofing, siding, and sheet metal work -----	1 162	11 162	255 941	953 142	896 277	516 872	386 302	56 865	8 800	3	2
1771	Concrete work -----	1 207	11 673	286 500	1 010 713	879 172	532 863	348 760	131 542	12 141	3	2
1781	Water well drilling -----	47	908	31 280	114 881	107 280	72 841	37 195	7 601	2 387	2	1
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	231	3 545	106 394	328 685	311 348	189 505	126 914	17 337	4 502	3	3
1793	Glass and glazing work -----	274	1 603	43 165	153 433	149 098	78 147	75 308	4 336	732	5	5
1794	Excavation work -----	323	2 953	82 169	321 495	(D)	195 153	90 286	(D)	5 697	6	(D)
1795	Wrecking and demolition work -----	66	971	23 572	74 028	65 382	59 392	11 027	8 646	764	6	11
1796	Installing building equipment, n.e.c. -----	165	4 259	126 800	340 371	326 176	241 709	86 721	14 195	1 379	1	1
1799	Special trade contractors, n.e.c. -----	1 412	12 705	312 671	926 985	829 733	586 916	261 557	97 252	15 061	3	3
15,16, 17	Los Angeles–Long Beach, CA PMSA											
	Construction industries -----	12 214	107 774	3 102 870	14 053 438	9 847 071	6 400 955	3 705 758	4 206 367	110 354	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	2 240	9 273	175 219	972 691	612 018	369 045	257 441	360 672	6 288	5	5
1522	Other residential buildings -----	211	1 802	43 162	384 888	217 518	115 164	105 752	167 369	4 856	8	6
1531	Operative builders -----	271	3 263	112 071	1 366 180	626 934	500 526	224 470	739 246	1 286	2	2
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	204	2 100	69 179	461 268	201 763	121 307	87 296	259 505	1 853	10	5
1542	Nonresidential buildings, n.e.c. -----	641	8 795	323 795	2 890 035	1 021 643	649 971	412 842	1 868 393	6 673	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	116	1 685	58 437	318 362	259 401	142 942	121 973	58 960	7 979	6	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	8	139	6 776	(D)	(D)	10 133	(D)	(D)	(D)	(Z)	(D)
1623	Water, sewer, and utility lines -----	154	4 324	171 160	597 475	537 422	376 721	161 704	60 053	15 494	3	3
1629	Heavy construction, n.e.c. -----	133	3 500	152 769	703 197	489 533	381 585	121 211	213 665	9 742	2	1

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.											
	Los Angeles—Long Beach, CA PMSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 790	13 414	432 456	1 469 330	1 348 056	850 901	504 136	121 274	13 810	2	2
1721	Painting and paper hanging	692	3 597	77 022	228 372	212 399	156 242	56 297	15 973	3 032	5	4
1731	Electrical work	1 523	13 033	426 217	1 292 708	1 209 062	731 551	489 551	83 645	9 947	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	317	(S)	(S)	(S)	(S)	(S)	67 000	6 044	2 266	(S)	(S)
1742	Plastering, drywall, and insulation work	456	5 691	148 537	382 914	354 808	227 753	137 538	28 105	3 522	3	4
1743	Terrazzo, tile, marble, and mosaic work	222	1 380	34 917	113 675	108 404	67 647	42 919	5 272	969	8	6
175	Carpentry and floor work:											
1751	Carpentry	626	4 790	96 798	318 461	300 607	175 377	131 361	17 854	1 572	6	4
1752	Floor laying and other floor work ...	264	1 789	43 165	156 186	146 948	82 912	64 813	9 237	1 596	7	7
1761	Roofing, siding, and sheet metal work	572	5 926	138 422	518 564	487 795	288 123	202 210	30 769	2 709	4	3
1771	Concrete work	471	4 619	113 569	397 087	352 363	213 755	140 423	44 724	3 837	4	4
1781	Water well drilling	8	237	6 421	(D)	(D)	15 591	8 477	(D)	1 078	6	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	95	1 823	53 740	157 413	148 179	97 623	53 397	9 234	1 689	4	4
1793	Glass and glazing work	132	787	19 177	66 020	64 289	35 817	(D)	1 730	(D)	6	9
1794	Excavation work	129	1 021	30 926	133 271	112 885	65 230	49 817	20 386	1 381	8	4
1795	Wrecking and demolition work	43	462	12 704	49 405	43 175	40 873	6 699	6 230	(D)	12	17
1796	Installing building equipment, n.e.c. ...	103	3 380	95 793	267 751	254 981	187 495	69 702	12 770	719	2	1
1799	Special trade contractors, n.e.c.	793	7 149	191 461	524 658	475 825	344 077	145 436	48 833	7 090	4	3
	Orange County, CA PMSA											
15,16, 17	Construction industries	5 346	63 974	1 727 156	8 238 752	5 761 760	3 622 397	2 295 327	2 476 992	51 968	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	813	4 023	81 789	602 656	377 987	255 509	128 719	224 669	3 126	5	4
1522	Other residential buildings	66	990	16 690	107 938	69 023	35 506	34 589	38 914	(S)	6	9
1531	Operative builders	107	3 022	113 287	1 484 423	763 089	495 995	312 395	721 334	2 233	1	3
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	133	1 292	41 149	256 730	93 286	56 978	47 599	163 443	696	12	10
1542	Nonresidential buildings, n.e.c.	367	4 619	164 029	1 653 652	761 704	449 796	319 533	891 949	2 510	4	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	73	1 202	42 877	219 251	175 546	99 210	77 790	43 704	1 678	6	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	69	936	28 135	112 302	97 155	66 788	30 935	15 148	3 164	12	6
1629	Heavy construction, n.e.c.	128	10 081	205 681	505 462	408 793	278 012	182 226	96 669	1 840	1	3
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	600	5 817	192 336	685 859	602 644	351 949	259 822	83 215	6 308	3	2
1721	Painting and paper hanging	369	2 794	60 889	171 454	162 073	118 895	43 204	9 381	2 680	4	3
1731	Electrical work	510	5 682	176 948	527 108	506 550	304 568	205 361	20 558	4 746	3	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	141	1 122	22 774	82 997	76 389	49 651	26 919	6 608	(S)	9	8
1742	Plastering, drywall, and insulation work	325	4 019	111 630	289 867	277 330	183 152	96 105	12 537	1 568	4	4
1743	Terrazzo, tile, marble, and mosaic work	133	824	19 493	56 263	53 621	34 090	19 540	2 642	568	9	6
175	Carpentry and floor work:											
1751	Carpentry	359	4 005	88 952	332 845	300 821	171 968	132 624	*32 025	2 826	6	4
1752	Floor laying and other floor work ...	129	1 131	30 649	118 752	106 973	58 072	53 275	11 779	(S)	5	5

CONSTRUCTION—GEOGRAPHIC AREA SERIES

CALIFORNIA CA—15

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.											
	Orange County, CA PMSA—Con.											
15,16, 17	Construction industries—Con.											
1761	Special trade contractors—Con.											
	Roofing, siding, and sheet metal work -----	(S)	2 952	74 307	253 475	236 395	139 063	101 155	17 080	4 768	7	6
1771	Concrete work -----	(S)	2 963	81 916	267 978	225 349	137 774	87 762	42 629	2 845	5	4
1781	Water well drilling -----	(S)	277	(D)	(D)	31 933	23 257	8 854	(D)	(D)	(Z)	(Z)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	46	473	14 870	41 279	(D)	23 174	14 193	(D)	1 664	10	(D)
1793	Glass and glazing work -----	70	431	12 195	48 191	46 075	22 025	24 115	2 116	(D)	13	8
1794	Excavation work -----	82	1 122	30 138	102 344	(D)	74 618	16 897	(D)	2 855	11	(D)
1795	Wrecking and demolition work -----	*15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -	23	564	22 916	47 639	47 232	36 582	10 661	407	329	(Z)	(Z)
1799	Special trade contractors, n.e.c. -----	281	3 163	72 209	208 816	(D)	138 926	54 996	(D)	1 545	5	(D)
	Riverside—San Bernardino, CA PMSA											
15,16, 17	Construction industries -----	5 893	45 857	1 148 010	5 161 311	3 992 780	2 339 766	1 729 272	1 168 531	76 985	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	(S)	3 179	57 351	369 955	273 395	150 282	129 333	96 560	(S)	5	6
1522	Other residential buildings -----	(S)	(S)	(D)	34 785	(S)	(S)	7 399	16 930	(S)	(S)	(S)
1531	Operative builders -----	119	1 548	45 072	520 006	263 062	185 542	99 816	256 944	(D)	3	3
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	77	639	18 751	129 877	51 804	27 230	25 452	78 073	(S)	17	13
1542	Nonresidential buildings, n.e.c. -----	272	1 850	52 759	439 164	164 359	107 753	65 351	274 805	4 152	8	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	(S)	2 019	76 425	376 151	268 104	150 689	120 579	108 048	9 495	4	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	181	3 434	102 319	417 188	363 101	197 043	168 764	54 087	11 269	4	3
1629	Heavy construction, n.e.c. -----	171	1 951	70 151	265 599	232 411	143 071	96 974	33 188	(S)	6	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning -----	690	4 150	111 502	421 504	398 014	216 878	184 741	23 490	5 062	3	3
1721	Painting and paper hanging -----	282	1 622	28 076	80 916	77 559	55 224	22 354	3 357	779	10	7
1731	Electrical work -----	582	4 016	102 773	347 165	330 052	190 553	142 181	17 113	(S)	5	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work -----	206	1 018	21 832	74 057	67 896	40 794	27 296	(S)	933	9	7
1742	Plastering, drywall, and insulation work -----	393	4 348	81 651	221 485	201 719	134 594	68 129	19 766	2 792	5	4
1743	Terrazzo, tile, marble, and mosaic work -----	94	645	13 633	37 948	37 085	23 296	14 489	863	117	12	10
175	Carpentry and floor work:											
1751	Carpentry -----	412	3 893	80 773	277 906	266 056	147 748	121 409	11 850	3 330	5	5
1752	Floor laying and other floor work -----	120	590	10 857	45 552	41 967	24 339	20 146	*3 585	424	11	16
1761	Roofing, siding, and sheet metal work -----	283	1 914	37 170	155 681	147 031	76 330	71 219	8 650	962	7	7
1771	Concrete work -----	389	3 499	80 571	304 281	264 162	160 599	103 924	40 119	4 966	5	4
1781	Water well drilling -----	25	365	13 126	(D)	(D)	31 864	18 627	(D)	516	3	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	76	1 163	34 902	123 177	119 590	63 532	57 556	3 586	1 113	6	6
1793	Glass and glazing work -----	51	325	10 404	32 367	31 898	17 278	(D)	469	(D)	11	10
1794	Excavation work -----	(S)	643	17 214	68 411	62 099	42 692	19 803	6 312	(D)	20	23
1795	Wrecking and demolition work -----	6	(D)	(D)	(D)	(S)	(D)	(D)	(D)	446	(D)	(S)
1796	Installing building equipment, n.e.c. -	35	296	7 140	22 092	(D)	15 392	5 988	(D)	(D)	12	(D)
1799	Special trade contractors, n.e.c. -----	281	1 945	39 861	165 799	(D)	88 204	51 620	(D)	6 004	8	(D)

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.											
	Ventura, CA PMSA											
15,16,17	Construction industries	1 571	10 619	274 687	1 040 753	858 100	540 005	330 810	182 653	11 596	3	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	636	11 060	(S)	(S)	(S)	(S)	(S)	(S)	11	(S)
1522	Other residential buildings	9	111	(D)	*13 297	*7 446	3 958	*5 267	*5 851	(S)	37	45
1531	Operative builders	12	65	1 287	30 649	19 378	12 069	10 465	11 271	(D)	(Z)	(Z)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(S)	(S)	26 088	(S)	3 513	(S)	17 178	(S)	(S)	(S)
1542	Nonresidential buildings, n.e.c.	64	640	15 597	94 261	51 232	32 730	19 534	43 028	511	17	8
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	39	840	36 055	150 723	115 880	68 824	47 187	34 843	1 997	9	7
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	29	434	16 293	52 489	48 705	33 603	15 420	3 783	1 205	5	4
1629	Heavy construction, n.e.c.	55	890	25 368	82 961	63 328	49 101	15 496	19 633	3 493	14	10
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	196	1 269	33 290	112 912	106 232	64 658	42 455	6 680	630	10	6
1721	Painting and paper hanging	125	352	6 589	23 791	23 281	16 849	6 445	510	(S)	14	18
1731	Electrical work	152	805	26 105	74 118	72 349	44 780	28 345	1 769	461	9	8
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	54	268	6 040	18 359	18 303	12 317	5 986	*55	181	16	8
1742	Plastering, drywall, and insulation work	99	1 110	24 274	64 247	61 831	37 594	24 248	2 416	203	9	9
1743	Terrazzo, tile, marble, and mosaic work	(S)	282	8 990	23 012	22 893	13 839	9 054	(S)	24	2	1
175	Carpentry and floor work:											
1751	Carpentry	106	883	18 665	63 763	58 360	34 230	24 615	5 403	399	12	11
1752	Floor laying and other floor work	(S)	143	2 284	8 118	7 696	5 300	2 890	422	32	8	10
1761	Roofing, siding, and sheet metal work	59	369	6 041	25 422	25 055	13 356	11 719	367	362	11	13
1771	Concrete work	(S)	592	10 443	41 367	37 298	20 735	16 651	4 070	493	12	15
1781	Water well drilling	(S)	29	(D)	(D)	(D)	2 129	1 237	(D)	(D)	(Z)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	86	2 882	6 817	(D)	5 177	1 767	(D)	36	18	(D)
1793	Glass and glazing work	22	60	1 389	6 855	6 835	3 026	(D)	(S)	(D)	13	17
1794	Excavation work	17	167	3 891	17 468	(D)	12 613	3 769	(D)	(D)	26	(D)
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c.	4	20	951	2 889	(D)	2 240	370	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c.	(S)	448	9 140	27 712	24 773	15 710	9 504	(S)	(S)	13	12
	SACRAMENTO—YOLO, CA CMSA											
15,16,17	Construction industries	4 518	32 230	845 404	4 164 981	2 936 657	1 817 002	1 172 578	1 228 324	43 810	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 101	3 909	69 097	391 395	272 436	165 765	114 058	118 959	4 565	6	5
1522	Other residential buildings	(S)	(S)	6 192	(S)	20 978	(S)	10 167	(S)	(D)	(S)	25
1531	Operative builders	147	1 427	38 481	441 905	279 283	187 876	100 607	162 621	1 232	4	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	45	333	10 338	61 004	32 310	17 120	15 480	28 695	(S)	18	17
1542	Nonresidential buildings, n.e.c.	266	3 046	102 921	893 874	300 914	213 795	94 587	592 959	3 514	6	5

CONSTRUCTION—GEOGRAPHIC AREA SERIES

CALIFORNIA CA—17

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SACRAMENTO-YOLO, CA CMSA—Con.											
15,16,17	Construction industries—Con.											
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	79	1 401	50 800	210 270	174 841	111 145	67 748	35 429	2 273	4	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	8	709	29 073	(D)	(D)	(D)	36 234	(D)	(D)	(Z)	(D)
1623	Water, sewer, and utility lines -----	88	692	19 943	72 654	59 520	40 434	21 959	13 134	791	13	10
1629	Heavy construction, n.e.c. -----	45	316	11 290	60 365	50 676	33 718	17 182	9 689	2 798	18	19
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	434	3 473	96 189	365 861	343 598	208 726	138 306	22 263	4 975	3	3
1721	Painting and paper hanging-----	263	1 010	19 582	52 595	51 458	35 357	16 162	(S)	921	9	8
1731	Electrical work -----	378	3 134	91 414	316 012	292 237	171 838	122 283	23 775	3 278	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	111	560	11 792	40 741	38 872	21 823	17 104	1 869	(D)	10	9
1742	Plastering, drywall, and insulation work -----	(S)	2 103	47 939	143 124	129 438	80 267	49 603	13 686	2 344	6	6
1743	Terrazzo, tile, marble, and mosaic work -----	136	570	13 558	39 239	38 060	22 257	15 826	1 180	114	9	8
175	Carpentry and floor work:											
1751	Carpentry -----	243	1 610	37 605	136 377	122 557	73 528	52 063	13 821	(S)	8	9
1752	Floor laying and other floor work ---	(S)	502	12 138	60 502	54 566	29 327	26 330	5 936	(S)	13	13
1761	Roofing, siding, and sheet metal work -----	(S)	1 811	36 267	144 647	138 550	77 663	61 419	6 096	1 857	5	5
1771	Concrete work -----	215	1 579	35 678	117 486	112 051	62 609	49 461	5 435	935	8	8
1781	Water well drilling -----	21	367	10 930	51 473	(D)	27 040	20 399	(D)	1 875	3	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	32	341	9 425	(D)	(D)	14 608	14 707	(D)	776	17	(D)
1793	Glass and glazing work -----	(S)	189	4 048	13 304	13 128	(D)	(D)	(S)	*15	8	7
1794	Excavation work -----	39	557	21 101	89 369	(D)	35 955	(D)	(D)	*139	6	(D)
1795	Wrecking and demolition work -----	*9	141	3 340	*16 247	(D)	*9 166	(D)	(D)	(S)	29	(D)
1796	Installing building equipment, n.e.c. -	31	544	15 719	39 277	37 612	27 606	10 006	1 665	323	18	13
1799	Special trade contractors, n.e.c.-----	175	1 617	40 542	140 213	113 631	67 238	49 556	26 582	3 930	6	6
	Sacramento, CA PMSA											
15,16,17	Construction industries -----	4 190	29 291	758 919	3 782 138	2 656 758	1 632 443	1 067 355	1 125 380	39 610	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	1 021	3 550	63 811	358 402	250 258	151 860	104 595	108 144	4 382	6	6
1522	Other residential buildings -----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1531	Operative builders -----	135	1 395	37 796	438 511	(D)	186 550	99 757	(D)	1 232	4	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	42	258	8 272	49 884	(D)	12 852	14 223	(D)	(D)	23	(D)
1542	Nonresidential buildings, n.e.c. -----	247	2 753	91 238	811 727	272 456	191 152	85 009	539 271	3 018	7	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	76	1 253	44 439	(D)	156 590	94 585	(D)	(D)	2 027	5	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	7	(D)	(D)	(D)	(D)	62 575	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	86	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1629	Heavy construction, n.e.c. -----	44	(D)	(D)	(D)	(D)	(D)	(D)	9 689	2 798	(D)	(D)

CA-18 CALIFORNIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SACRAMENTO-YOLO, CA CMSA—Con.											
	Sacramento, CA PMSA—Con.											
15,16,17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	405	3 358	92 173	352 808	(D)	203 625	130 850	(D)	4 702	3	(D)
1721	Painting and paper hanging	255	956	18 324	49 260	48 151	33 078	15 134	(S)	840	10	8
1731	Electrical work	350	2 645	75 237	258 193	239 009	133 157	107 732	19 184	2 736	3	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	111	560	11 792	40 741	38 872	21 823	17 104	1 869	(D)	10	9
1742	Plastering, drywall, and insulation work	(S)	1 834	40 224	114 932	104 174	65 960	38 647	*10 758	2 111	7	8
1743	Terrazzo, tile, marble, and mosaic work	121	520	12 593	36 793	35 640	20 650	15 013	1 154	78	10	9
175	Carpentry and floor work:											
1751	Carpentry	229	1 495	34 342	123 026	(D)	67 663	46 240	(D)	(D)	9	(D)
1752	Floor laying and other floor work	(S)	487	11 945	58 891	53 155	28 348	25 866	5 736	(S)	14	14
1761	Roofing, siding, and sheet metal work	(S)	1 722	34 094	134 935	129 968	71 559	58 933	4 967	1 670	5	5
1771	Concrete work	212	1 516	34 863	115 506	110 243	61 459	48 803	5 263	935	8	8
1781	Water well drilling	15	132	4 066	16 491	16 491	9 310	7 207	—	(D)	6	8
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	32	341	9 425	(D)	(D)	14 608	14 707	(D)	776	17	(D)
1793	Glass and glazing work	(S)	161	3 528	12 377	12 201	7 377	(D)	(S)	*15	13	12
1794	Excavation work	35	(D)	(D)	(D)	52 234	(D)	(D)	(D)	(D)	(D)	6
1795	Wrecking and demolition work	7	115	2 343	7 738	(D)	4 222	(D)	(D)	—	30	(D)
1796	Installing building equipment, n.e.c.	28	490	13 040	33 212	(D)	22 457	(D)	(D)	(D)	20	(D)
1799	Special trade contractors, n.e.c.	161	1 436	36 323	131 221	104 929	61 215	46 468	26 292	3 898	7	6
	Yolo, CA PMSA											
15,16,17	Construction industries	(S)	2 939	86 485	382 843	279 899	184 559	105 223	102 944	4 200	6	4
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	79	(S)	5 286	32 993	22 178	13 905	9 463	(S)	(S)	(S)	23
1522	Other residential buildings	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1531	Operative builders	(S)	32	685	3 394	(D)	(S)	(S)	(D)	—	(Z)	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	3	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
1542	Nonresidential buildings, n.e.c.	(S)	293	11 683	82 147	28 458	22 643	9 578	53 689	(S)	20	17
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	3	148	6 361	(D)	18 251	16 560	(D)	(D)	246	(Z)	(Z)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1623	Water, sewer, and utility lines	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1629	Heavy construction, n.e.c.	1	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	(S)	115	4 016	13 053	(D)	5 101	7 456	(D)	*273	20	(D)
1721	Painting and paper hanging	*8	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1731	Electrical work	27	488	16 177	57 820	53 229	38 680	14 550	4 591	542	7	6
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	—	—	—	—	—	—	—	—	—	—	—
1742	Plastering, drywall, and insulation work	(S)	269	7 715	28 192	25 264	14 308	10 956	2 928	233	23	15
1743	Terrazzo, tile, marble, and mosaic work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
175	Carpentry and floor work:											
1751	Carpentry	*14	115	3 263	13 351	(D)	5 865	5 823	(D)	(D)	26	(D)
1752	Floor laying and other floor work	(S)	(S)	*193	*1 611	*1 411	(S)	(S)	(S)	—	(S)	67
1761	Roofing, siding, and sheet metal work	(S)	*89	2 174	9 712	8 583	6 104	2 486	1 129	(S)	45	25
1771	Concrete work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	(S)	(S)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

CALIFORNIA CA—19

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SACRAMENTO-YOLO, CA CMSA—Con.											
	Yolo, CA PMSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1781	Water well drilling	7	236	6 864	34 982	(D)	17 730	13 192	(D)	(D)	4	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	—	—	—	—	—	—	—	—	—	—	—
1793	Glass and glazing work	(S)	(S)	(S)	*927	*927	(D)	(S)	—	—	(S)	74
1794	Excavation work	*4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1795	Wrecking and demolition work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(Z)	(S)
1796	Installing building equipment, n.e.c. ..	3	54	2 679	6 065	(D)	5 149	(D)	(D)	(D)	(Z)	(D)
1799	Special trade contractors, n.e.c.	14	182	4 219	8 991	8 701	6 023	3 088	290	32	14	24
	SAN FRANCISCO-OAKLAND—SAN JOSE, CA CMSA											
15,16,17	Construction industries	15 698	128 595	4 068 869	17 428 806	12 511 463	7 858 635	4 871 350	4 917 343	173 593	1	(Z)
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	4 269	16 696	378 749	2 176 297	1 442 887	857 799	620 070	733 409	15 683	2	3
1522	Other residential buildings	294	1 792	46 018	289 987	172 682	90 189	85 164	117 305	1 154	8	8
1531	Operative builders	337	3 373	123 605	1 456 050	838 852	582 289	299 222	617 198	4 479	3	2
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	137	1 741	64 866	419 173	179 765	125 359	63 761	239 409	(S)	7	7
1542	Nonresidential buildings, n.e.c.	876	10 081	413 103	3 255 794	1 116 406	705 843	453 304	2 139 387	19 873	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	164	4 074	161 239	807 367	562 338	264 753	304 665	245 028	12 914	1	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	20	686	30 159	144 215	112 300	61 693	51 024	31 915	1 439	5	5
1623	Water, sewer, and utility lines	181	2 765	101 926	406 562	352 032	204 282	150 734	54 529	10 159	3	3
1629	Heavy construction, n.e.c.	245	8 965	355 091	1 109 732	883 837	632 165	264 399	225 894	14 257	1	1
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	1 437	13 849	530 888	1 601 354	1 480 676	932 201	560 607	120 678	25 509	2	2
1721	Painting and paper hanging	1 212	6 125	140 708	371 435	357 650	251 655	106 252	13 785	5 722	3	2
1731	Electrical work	1 364	13 143	453 798	1 321 900	1 261 659	779 051	489 631	60 241	13 651	1	1
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	306	1 455	37 974	126 301	112 165	73 179	39 134	*14 137	1 441	6	6
1742	Plastering, drywall, and insulation work	674	7 231	213 143	568 844	541 755	363 120	180 303	27 090	5 047	3	2
1743	Terrazzo, tile, marble, and mosaic work	362	1 905	50 756	152 499	148 730	86 954	62 551	3 769	2 023	5	5
175	Carpentry and floor work:											
1751	Carpentry	(S)	5 649	147 824	525 206	481 904	308 735	176 034	43 302	(S)	4	2
1752	Floor laying and other floor work ..	412	2 771	71 415	285 193	259 014	127 862	135 185	26 179	2 487	5	4
1761	Roofing, siding, and sheet metal work	776	6 659	156 973	570 984	533 928	313 230	232 548	37 056	4 782	4	3
1771	Concrete work	628	6 281	182 058	573 127	513 452	322 627	193 237	59 676	7 350	3	2
1781	Water well drilling	35	321	8 611	24 295	23 663	16 670	8 235	632	1 771	9	7
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	94	1 569	57 388	182 378	166 100	103 949	63 348	16 278	1 288	7	1
1793	Glass and glazing work	207	1 187	39 551	133 889	131 296	67 522	71 299	2 592	1 792	7	5
1794	Excavation work	161	1 238	41 772	148 865	130 949	106 257	26 347	17 917	3 405	6	5
1795	Wrecking and demolition work	38	492	14 904	55 314	49 640	44 883	5 641	5 674	570	8	5
1796	Installing building equipment, n.e.c. ..	101	2 471	88 683	244 946	231 153	165 296	67 809	13 793	3 796	1	2
1799	Special trade contractors, n.e.c.	683	6 079	157 666	477 099	426 629	271 074	160 844	50 469	6 316	4	3

CA-20 CALIFORNIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.											
	Oakland, CA PMSA											
15,16,17	Construction industries	4 826	47 115	1 459 370	6 003 820	4 531 721	2 869 445	1 756 361	1 472 099	72 828	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 251	6 392	148 807	791 882	524 818	309 629	228 244	267 064	4 363	4	4
1522	Other residential buildings	(S)	(S)	(S)	74 461	52 795	25 762	(S)	21 666	(S)	(S)	11
1531	Operative builders	88	1 700	67 957	840 382	467 006	346 325	149 202	373 376	2 129	4	2
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	39	534	19 311	113 057	53 813	38 852	16 194	59 243	608	13	12
1542	Nonresidential buildings, n.e.c.	270	2 402	91 219	517 632	226 740	148 987	86 376	290 892	10 067	7	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	1 606	67 115	388 857	235 392	64 420	175 775	153 465	6 349	1	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	*9	106	4 467	18 730	(D)	(D)	7 044	(D)	(D)	29	(D)
1623	Water, sewer, and utility lines	64	993	39 701	167 517	143 739	83 667	61 355	23 778	5 519	4	4
1629	Heavy construction, n.e.c.	88	3 586	133 745	422 349	343 600	264 615	87 911	78 749	3 777	2	3
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	432	4 461	165 062	498 499	460 567	282 629	183 560	37 932	15 055	4	4
1721	Painting and paper hanging	364	2 167	52 454	134 751	130 100	86 461	43 799	4 651	2 616	6	3
1731	Electrical work	454	4 719	147 758	405 034	386 015	246 299	141 673	19 019	3 333	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	108	679	18 944	64 590	52 038	33 089	19 079	(S)	(S)	10	11
1742	Plastering, drywall, and insulation work	183	2 173	60 826	169 594	162 981	107 020	56 693	6 613	1 127	6	5
1743	Terrazzo, tile, marble, and mosaic work	104	509	13 536	41 168	39 733	23 518	16 299	1 435	1 077	7	8
175	Carpentry and floor work:											
1751	Carpentry	(S)	2 455	64 830	242 673	233 072	156 221	77 637	(S)	1 337	6	3
1752	Floor laying and other floor work	114	956	21 690	91 695	80 644	40 065	43 003	11 051	684	9	6
1761	Roofing, siding, and sheet metal work	281	2 425	55 663	200 311	190 354	107 607	86 621	9 957	1 302	4	4
1771	Concrete work	169	2 690	81 469	250 481	221 884	149 256	73 825	28 597	3 241	4	3
1781	Water well drilling	(S)	42	1 215	3 449	3 372	(D)	1 192	77	(D)	(Z)	(Z)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	30	667	26 834	89 585	79 212	49 993	29 531	10 373	541	1	(Z)
1793	Glass and glazing work	70	565	17 948	60 541	(D)	30 140	33 802	(D)	(S)	12	(D)
1794	Excavation work	54	386	14 508	49 863	(D)	34 643	8 578	(D)	1 667	11	(D)
1795	Wrecking and demolition work	13	261	7 762	28 499	24 234	20 887	3 909	4 265	*255	2	5
1796	Installing building equipment, n.e.c.	38	1 003	42 547	112 680	101 591	68 774	34 602	11 089	2 353	(Z)	(Z)
1799	Special trade contractors, n.e.c.	252	3 066	80 017	225 538	202 658	142 047	62 978	22 881	3 557	5	5
	San Francisco, CA PMSA											
15,16,17	Construction industries	4 023	31 926	1 081 787	4 900 565	3 088 978	1 953 622	1 191 790	1 811 587	36 025	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 142	3 824	93 280	528 988	365 112	222 375	150 526	163 877	3 995	5	4
1522	Other residential buildings	94	703	18 005	102 706	56 849	36 788	21 219	45 857	394	13	14
1531	Operative builders	99	775	19 460	218 700	130 239	83 299	54 870	88 461	(S)	9	6
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1542	Nonresidential buildings, n.e.c.	278	4 721	213 501	1 802 422	558 481	349 591	234 255	1 243 940	6 292	3	3

CONSTRUCTION—GEOGRAPHIC AREA SERIES

CALIFORNIA CA—21

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.											
	San Francisco, CA PMSA—Con.											
15,16, 17	Construction industries—Con.											
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	36	905	36 643	147 730	121 038	80 916	40 154	26 692	3 559	2	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	5	203	(D)	39 519	30 880	23 237	8 041	8 639	314	6	6
1623	Water, sewer, and utility lines	23	514	19 693	78 549	65 041	37 323	27 834	(S)	(S)	3	3
1629	Heavy construction, n.e.c.	31	(D)	(D)	234 418	171 311	102 087	69 330	63 107	2 436	(D)	2
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	396	3 466	132 636	384 327	349 231	221 603	129 177	35 096	3 371	4	4
1721	Painting and paper hanging	342	1 866	43 723	116 295	111 203	81 032	30 249	5 092	(S)	6	5
1731	Electrical work	356	3 110	115 439	326 440	315 977	198 697	119 995	10 462	3 213	3	4
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	33	118	2 664	8 325	8 186	5 969	2 218	*138	156	28	27
1742	Plastering, drywall, and insulation work	139	1 381	48 707	128 264	121 352	82 153	39 714	6 912	(S)	7	5
1743	Terrazzo, tile, marble, and mosaic work	77	315	9 255	28 118	27 285	17 288	10 448	*833	161	15	16
175	Carpentry and floor work:											
1751	Carpentry	(S)	938	23 961	88 060	76 238	48 524	28 613	11 822	(S)	9	8
1752	Floor laying and other floor work	109	596	15 910	61 539	56 088	26 838	30 006	5 452	(D)	11	10
1761	Roofing, siding, and sheet metal work	196	1 616	41 600	151 162	137 397	84 907	53 068	13 765	1 252	6	4
1771	Concrete work	99	712	18 844	55 529	50 517	29 906	21 114	5 013	656	10	9
1781	Water well drilling	(S)	(D)	1 519	3 840	(D)	2 455	1 307	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	164	5 672	16 556	(D)	11 191	5 047	(D)	182	12	(D)
1793	Glass and glazing work	63	285	9 118	30 580	30 001	17 043	14 495	579	631	16	13
1794	Excavation work	46	317	8 999	30 147	26 319	22 626	5 164	3 829	374	13	7
1795	Wrecking and demolition work	8	(D)	(D)	17 738	16 644	16 499	417	1 094	130	(D)	2
1796	Installing building equipment, n.e.c. ..	25	1 164	32 100	93 980	91 632	69 822	21 867	2 348	292	1	3
1799	Special trade contractors, n.e.c.	(S)	1 227	32 531	113 137	100 714	49 107	52 580	12 424	1 883	10	8
	San Jose, CA PMSA											
15,16, 17	Construction industries	3 161	27 930	934 351	3 905 159	2 860 273	1 793 802	1 104 117	1 044 885	33 009	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	784	3 103	67 604	406 912	254 269	146 140	113 100	152 643	3 780	6	6
1522	Other residential buildings	(S)	163	6 105	41 987	23 325	12 956	10 733	18 662	75	9	6
1531	Operative builders	(S)	536	23 403	292 556	178 037	106 783	73 431	114 519	478	9	7
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	47	655	26 878	169 939	56 734	(S)	21 297	113 205	319	10	9
1542	Nonresidential buildings, n.e.c.	152	1 771	67 856	621 565	203 047	130 753	80 593	418 518	2 249	7	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	18	763	28 333	156 004	110 372	64 872	46 219	45 633	1 279	3	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	45	519	18 995	66 442	61 011	33 065	28 742	5 431	1 543	11	9
1629	Heavy construction, n.e.c.	35	688	27 130	103 117	75 869	57 298	18 683	27 248	(D)	7	6

CA—22 CALIFORNIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.											
	San Jose, CA PMSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	316	4 066	175 140	516 176	480 428	316 973	165 221	35 748	5 052	3	2
1721	Painting and paper hanging	(S)	1 338	32 122	81 907	78 902	58 428	20 486	3 005	1 024	6	5
1731	Electrical work	303	3 765	146 231	456 020	432 008	259 378	173 905	24 012	5 313	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	97	399	9 004	29 159	28 346	17 849	10 512	814	363	10	12
1742	Plastering, drywall, and insulation work	167	2 354	69 919	172 095	162 276	112 710	49 987	9 820	1 764	3	3
1743	Terrazzo, tile, marble, and mosaic work	99	596	15 269	47 791	46 731	26 575	20 188	1 060	447	12	7
175	Carpentry and floor work:											
1751	Carpentry	(S)	812	22 842	85 486	76 531	43 188	34 095	8 955	(S)	7	8
1752	Floor laying and other floor work	97	867	24 895	86 708	82 779	44 134	39 360	3 929	1 252	9	7
1761	Roofing, siding, and sheet metal work	135	1 397	37 910	127 327	118 446	72 806	50 872	8 881	1 003	5	4
1771	Concrete work	158	1 685	52 131	164 888	147 596	90 601	57 596	17 292	(S)	6	5
1781	Water well drilling	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	19	444	17 180	52 188	48 940	27 407	22 076	3 248	403	1	1
1793	Glass and glazing work	51	216	8 869	27 645	(D)	13 900	(D)	(D)	(D)	12	(D)
1794	Excavation work	(S)	289	12 132	47 494	(D)	35 558	7 623	(D)	(D)	12	(D)
1795	Wrecking and demolition work	*12	103	(D)	(D)	(D)	(D)	*1 204	(D)	(S)	38	(D)
1796	Installing building equipment, n.e.c. -	13	123	6 244	(D)	(D)	11 235	2 950	(D)	23	(Z)	(D)
1799	Special trade contractors, n.e.c.	(S)	1 050	27 614	87 198	74 653	45 978	30 297	12 545	393	13	9
	Santa Cruz—Watsonville, CA PMSA											
15,16, 17	Construction industries	864	3 638	82 819	380 062	288 820	165 875	128 350	91 242	5 547	3	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	317	829	14 237	88 917	64 718	35 823	30 460	24 199	510	11	10
1522	Other residential buildings	(S)	*150	(S)	(S)	(S)	*5 475	(S)	11 983	*23	40	(S)
1531	Operative builders	(S)	(S)	(S)	18 845	12 500	8 882	(S)	(S)	(S)	(S)	19
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(D)	(D)	(S)	1 856	(D)	662	(S)	(D)	(D)	(Z)
1542	Nonresidential buildings, n.e.c.	27	216	6 322	53 396	18 236	11 604	6 659	35 160	98	12	13
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	5	176	6 748	26 759	(D)	12 584	(D)	(D)	676	7	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	(S)	(S)	1 007	2 895	(D)	1 787	(S)	(D)	(D)	(S)	(D)
1629	Heavy construction, n.e.c.	10	37	1 278	5 754	3 967	2 686	1 281	*1 787	(D)	8	8
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	66	337	11 541	42 024	(D)	18 850	22 213	(D)	293	5	(D)
1721	Painting and paper hanging	61	162	2 517	8 387	8 000	5 645	2 355	387	*69	8	5
1731	Electrical work	71	359	8 964	27 424	27 134	15 219	12 449	290	230	8	9
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	(S)	(S)	(D)	(D)	(S)	(S)	(D)	(S)	(S)	(D)
1742	Plastering, drywall, and insulation work	35	205	3 157	9 953	9 204	5 276	3 928	749	*510	17	10
1743	Terrazzo, tile, marble, and mosaic work	25	74	1 302	4 333	(D)	2 428	1 735	(D)	(D)	11	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	(S)	5 093	12 186	11 878	6 235	(S)	308	*137	(S)	20
1752	Floor laying and other floor work	(S)	48	756	3 165	3 121	1 953	1 190	(S)	(D)	7	7
1761	Roofing, siding, and sheet metal work	(S)	(S)	3 901	13 852	13 320	7 969	5 379	(S)	(S)	(S)	13

CONSTRUCTION—GEOGRAPHIC AREA SERIES

CALIFORNIA CA—23

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.											
	Santa Cruz—Watsonville, CA PMSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1771	Concrete work	38	247	4 775	12 445	11 367	7 749	3 630	1 078	651	16	9
1781	Water well drilling	6	(D)	(D)	6 520	(D)	4 765	1 533	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	1	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1793	Glass and glazing work	4	13	512	2 067	(D)	1 217	(D)	(D)	—	(Z)	(D)
1794	Excavation work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	(S)	(S)	(S)
1795	Wrecking and demolition work	*2	(D)	(D)	*162	*152	*132	*20	*10	—	57	71
1796	Installing building equipment, n.e.c.	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	(S)	71	(S)	(S)	(S)	(S)	(S)	(S)	(S)	28	(S)
	Santa Rosa, CA PMSA											
15,16,17	Construction industries	1 707	9 102	241 046	1 143 887	881 009	529 602	369 143	262 879	10 563	3	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	518	1 465	28 367	195 588	129 835	83 128	53 435	65 753	1 104	7	17
1522	Other residential buildings	40	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(S)
1531	Operative builders	(S)	272	10 061	78 331	46 516	33 920	16 203	(S)	940	14	6
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(D)	2 852	16 039	6 602	(D)	2 945	9 437	(D)	(D)	9
1542	Nonresidential buildings, n.e.c.	101	669	22 653	163 659	76 125	45 424	30 917	87 534	957	12	9
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	367	13 389	48 571	36 789	20 941	17 188	11 782	527	11	10
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1623	Water, sewer, and utility lines	23	486	16 660	67 820	58 167	35 061	23 616	9 653	1 273	6	3
1629	Heavy construction, n.e.c.	43	(D)	(D)	98 393	85 263	53 227	32 043	13 130	(D)	(D)	4
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	122	648	20 792	66 129	(D)	36 874	25 987	(D)	472	6	(D)
1721	Painting and paper hanging	114	346	5 938	16 891	16 697	11 346	5 355	194	*447	10	11
1731	Electrical work	93	467	12 414	39 792	38 065	20 697	17 657	1 728	345	11	10
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	82	1 887	(D)	(D)	3 731	1 640	(S)	(S)	15	(D)
1742	Plastering, drywall, and insulation work	(S)	681	19 059	60 379	58 681	36 467	22 214	(S)	388	9	10
1743	Terrazzo, tile, marble, and mosaic work	47	313	8 307	22 677	22 462	13 568	9 065	214	(D)	13	10
175	Carpentry and floor work:											
1751	Carpentry	50	582	13 210	44 592	35 021	(S)	8 847	*9 572	(S)	10	11
1752	Floor laying and other floor work	(S)	131	2 552	11 540	10 556	5 108	5 534	984	(D)	12	7
1761	Roofing, siding, and sheet metal work	68	644	10 329	45 878	44 649	22 820	23 964	1 229	219	28	22
1771	Concrete work	96	475	10 212	38 683	35 959	21 337	14 721	2 724	1 215	14	11
1781	Water well drilling	10	84	3 058	8 732	8 634	(D)	2 983	98	77	10	16
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	*13	(D)	(D)	(D)	(D)	(D)	1 440	(S)	(D)	(D)	(D)
1793	Glass and glazing work	11	70	2 280	8 226	8 205	3 373	(D)	21	*44	10	13
1794	Excavation work	15	142	3 614	10 345	(D)	5 938	2 849	(D)	(D)	23	(D)
1795	Wrecking and demolition work	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1796	Installing building equipment, n.e.c.	*17	120	4 991	(D)	(D)	10 377	6 823	(S)	(D)	20	(D)
1799	Special trade contractors, n.e.c.	56	187	4 631	15 761	15 028	10 134	5 041	734	(D)	20	23

CA—24 CALIFORNIA

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.											
	Vallejo—Fairfield—Napa, CA PMSA											
15,16,17	Construction industries	1 118	8 884	269 495	1 095 313	860 662	546 288	321 589	234 651	15 620	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S) 21	1 083	26 455	164 009	104 136	60 704	44 306	59 873	1 930	10	6
1522	Other residential buildings		*89	2 672	22 796	10 095	3 987	6 111	12 702	(D)	46	27
1531	Operative builders	*21	*58	*1 656	7 236	*4 554	3 079	*1 494	2 681	*224	42	40
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	*15	(S) 301	(D) 11 551	(S) 97 120	9 243	6 664	2 580	(S) 63 344	(D) 210	(S) 16	25
1542	Nonresidential buildings, n.e.c.	48				33 776	19 485	(S)				19
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	32	257	9 011	39 445	(D)	21 021	(D)	(D)	(S)	9	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	*3	(D)	*1 650	(D)	(D)	(D)	*1 440	(S)	518	(D)	(D)
1623	Water, sewer, and utility lines	22	224	5 870	23 339	(D)	13 378	8 360	(D)	(D)	11	(D)
1629	Heavy construction, n.e.c.	38	1 693	66 651	245 700	203 827	152 252	55 152	41 873	5 877	4	3
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	105	872	25 716	94 199	89 055	55 272	34 448	5 144	1 265	11	12
1721	Painting and paper hanging	78	245	3 954	13 204	12 747	8 744	4 008	457	*146	17	15
1731	Electrical work	88	723	22 994	67 191	62 461	38 760	23 953	4 730	1 217	7	5
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	27	131	4 488	(D)	(D)	9 615	5 012	(D)	(S)	12	(D)
1742	Plastering, drywall, and insulation work	49	437	11 474	28 560	27 260	19 494	7 766	(S)	362	12	14
1743	Terrazzo, tile, marble, and mosaic work	10	98	3 087	8 412	(D)	3 576	4 817	(D)	(D)	6	(D)
175	Carpentry and floor work:											
1751	Carpentry	55	594	17 888	52 208	49 164	28 174	21 186	3 044	154	11	6
1752	Floor laying and other floor work	(S) 174		5 612	30 546	25 826	9 764	16 092	4 719	*244	5	18
1761	Roofing, siding, and sheet metal work	54	363	7 570	32 454	29 762	17 122	12 645	2 692	509	15	12
1771	Concrete work	68	471	14 628	51 101	46 129	23 778	22 352	(S)	508	11	9
1781	Water well drilling	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	*12	*251	6 776	(D)	(D)	(D)	(D)	(D)	(D)	42	(D)
1793	Glass and glazing work	8	38	824	4 829	(D)	1 849	2 974	(D)	(D)	(Z)	(D)
1794	Excavation work	14	102	2 473	10 785	9 320	7 282	2 112	1 465	(D)	18	10
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1796	Installing building equipment, n.e.c.	5	(D)	4 349	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	62	479	11 657	31 024	29 372	20 740	8 769	1 652	(D)	9	7
	FRESNO, CA MSA											
15,16,17	Construction industries	1 791	14 208	349 051	1 755 587	1 268 290	770 122	516 721	487 297	18 374	2	3
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	1 316	21 781	151 898	109 999	65 451	45 448	41 898	(S)	10	11
1522	Other residential buildings	(S)	171	(S)	(S)	(S)	*7 634	(S)	(S)	(S)	39	(S)
1531	Operative builders	50	630	21 490	291 489	153 058	94 981	63 019	138 431	1 955	5	21
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	30	452	13 529	109 058	58 268	19 405	39 740	50 790	751	10	6
1542	Nonresidential buildings, n.e.c.	68	743	27 679	264 433	93 335	59 337	35 256	171 098	1 427	9	5

CONSTRUCTION—GEOGRAPHIC AREA SERIES

CALIFORNIA CA—25

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	FRESNO, CA MSA—Con.											
15,16, 17	Construction industries—Con.											
	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	27	475	15 011	77 154	66 138	38 098	28 668	11 016	1 831	9	8
162 1622	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	—	—	—	—	—	—	—	—	—	—	—
1623 1629	Water, sewer, and utility lines ----- Heavy construction, n.e.c. -----	24 50	437 630	11 320 (S)	46 513 67 576	37 764 57 200	30 359 (S)	8 941 23 465	8 749 (S)	648 1 387	15 8	13 6
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	184	1 693	44 670	149 264	142 907	81 745	62 509	6 356	1 800	5	5
1721	Painting and paper hanging-----	(S)	421	7 869	22 460	22 235	15 236	6 998	(S)	(S)	11	10
1731	Electrical work -----	125	934	24 520	85 931	81 868	47 048	35 831	4 063	297	8	10
174 1741	Masonry, stone work, tile setting, and plastering: Masonry, stone setting, and other stone work-----	(S)	353	10 354	30 724	29 952	19 320	10 687	772	(D)	9	5
1742	Plastering, drywall, and insulation work-----	123	1 919	44 714	135 299	129 677	88 754	41 042	5 621	684	6	10
1743	Terrazzo, tile, marble, and mosaic work -----	43	358	8 989	25 377	25 272	13 043	12 756	105	314	13	9
175 1751 1752	Carpentry and floor work: Carpentry----- Floor laying and other floor work---	(S) 40	566 167	10 438 3 604	27 684 10 474	25 562 10 299	18 851 6 804	6 866 3 559	(S) 175	462 187	20 22	15 15
1761	Roofing, siding, and sheet metal work -----	(S)	601	11 156	51 423	47 768	25 516	22 399	3 655	1 239	9	10
1771	Concrete work -----	123	850	14 297	54 130	50 985	28 749	22 292	3 145	1 306	10	9
1781	Water well drilling -----	15	135	4 155	15 313	15 051	10 105	4 998	262	273	12	11
179 1791 1793 1794 1795 1796 1799	Miscellaneous special trade contractors: Structural steel erection ----- Glass and glazing work ----- Excavation work ----- Wrecking and demolition work ----- Installing building equipment, n.e.c. - Special trade contractors, n.e.c.-----	10 15 (S) 2 6 114	225 98 (S) (D) (D) 777	7 226 2 644 *3 249 (D) (D) 16 077	19 599 8 043 *14 996 (D) (D) 72 243	19 202 (D) 9 106 (D) (D) 58 212	13 224 3 735 6 326 (D) (D) 37 920	5 992 5 342 *2 950 (D) (D) 22 393	397 (D) (S) — (D) *14 031	(D) *4 (S) — (D) 1 037	(Z) 21 (D) 41 (D) (D) 10	(Z) (D) 41 (D) (D) 13
	SAN DIEGO, CA MSA											
15,16, 17	Construction industries -----	5 403	44 236	1 186 333	5 408 127	3 724 569	2 197 678	1 599 659	1 683 559	62 305	1	1
15	Building construction—General contractors and operative builders:											
152 1521 1522	General contractors, residential buildings: Single-family houses ----- Other residential buildings -----	867 92	3 611 432	77 479 10 564	440 020 91 459	273 751 46 019	155 573 32 639	127 291 (S)	166 269 45 440	3 967 (S)	5 23	5 27
1531	Operative builders -----	125	1 220	37 150	331 695	172 170	104 956	77 574	159 526	1 017	3	9
154 1541 1542	General contractors, nonresidential buildings: Industrial buildings and warehouses ----- Nonresidential buildings, n.e.c. -----	(S) 351	801 4 598	24 050 155 250	(S) 1 333 010	(S) 437 589	38 189 260 437	(S) 188 797	(S) 895 421	(S) 4 718	15 4	(S) 3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	93	1 419	56 742	221 852	174 865	109 557	70 339	46 988	2 950	5	4
162 1622	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623 1629	Water, sewer, and utility lines ----- Heavy construction, n.e.c. -----	75 (S)	1 370 910	44 533 33 790	201 773 191 053	178 649 128 192	106 242 61 718	74 724 68 116	23 124 62 861	11 525 7 946	3 6	2 6

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SAN DIEGO, CA MSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning-----	576	4 745	150 254	503 167	456 711	265 120	194 903	46 455	5 594	3	3
1721	Painting and paper hanging-----	357	1 584	30 395	95 349	88 459	60 667	27 801	6 890	578	6	7
1731	Electrical work -----	514	4 393	130 907	443 123	412 706	230 059	184 849	30 417	6 395	3	3
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work-----	163	789	15 804	52 953	51 734	32 940	20 021	*1 219	(D)	13	12
1742	Plastering, drywall, and insulation work -----	339	4 236	94 131	224 555	208 492	137 664	71 915	16 063	2 754	3	4
1743	Terrazzo, tile, marble, and mosaic work -----	140	699	15 386	42 772	42 286	27 522	15 094	(S)	(S)	12	10
175	Carpentry and floor work:											
1751	Carpentry -----	358	2 576	58 206	211 515	192 749	109 423	86 159	18 767	1 190	5	8
1752	Floor laying and other floor work ---	154	979	17 315	62 590	57 990	35 219	23 620	4 600	327	8	7
1761	Roofing, siding, and sheet metal work -----	218	2 105	40 988	146 406	143 110	78 232	66 052	3 296	1 379	5	5
1771	Concrete work -----	279	2 257	57 370	202 634	167 653	96 948	71 582	34 980	(S)	6	5
1781	Water well drilling -----	11	(D)	(D)	(D)	(D)	(D)	(D)	142	(S)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	44	1 238	35 264	126 206	118 542	57 519	64 953	7 663	361	2	4
1793	Glass and glazing work -----	81	440	12 559	44 309	44 043	27 131	22 239	266	453	17	8
1794	Excavation work -----	90	624	13 805	54 507	50 018	32 927	17 391	4 489	551	17	12
1795	Wrecking and demolition work -----	*15	193	3 767	*19 419	(D)	9 118	3 539	(D)	(D)	18	(D)
1796	Installing building equipment, n.e.c. -	14	191	8 359	22 963	22 320	15 650	6 670	643	110	(Z)	(Z)
1799	Special trade contractors, n.e.c.-----	291	2 717	58 279	179 781	160 563	103 557	61 456	19 218	3 038	6	5

Contents

Hawaii

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Hawaii. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 6,830 establishments in this State operating in the construction industries. These establishments accounted for \$5.1 billion in total dollar value of business done.

Most of the 6,830 construction establishments were small. Of the total, 4,349 were nonemployers, and over half of the employer establishments had less than 5 employees. The 1,185 construction establishments with 5 employees or more, while representing only 17 percent of all establishments, accounted for more than 91 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$5.0 billion in total dollar value of business done. Of this amount, \$4.8 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.3 billion, leaving net value of construction work of \$3.6 billion. In addition, these establishments paid out \$1.7 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$2.1 billion. (See Introduction and appendixes for explanation of terms.)

There were 2,481 establishments with total employment averaging 32,394 during the year. Total payroll for 1992 was \$1.1 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 4,349 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$137 million. Most of these establishments, about 81 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

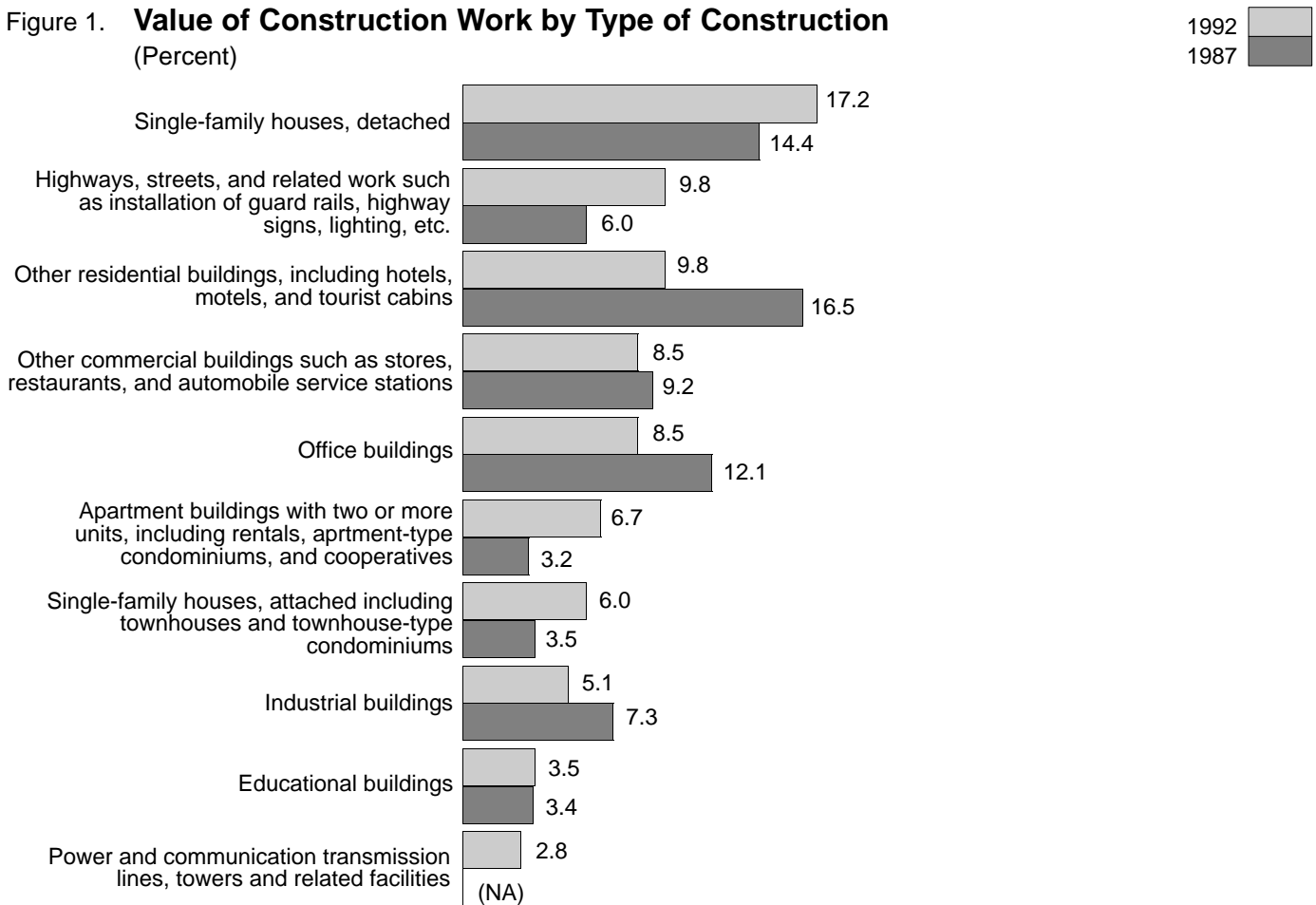


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

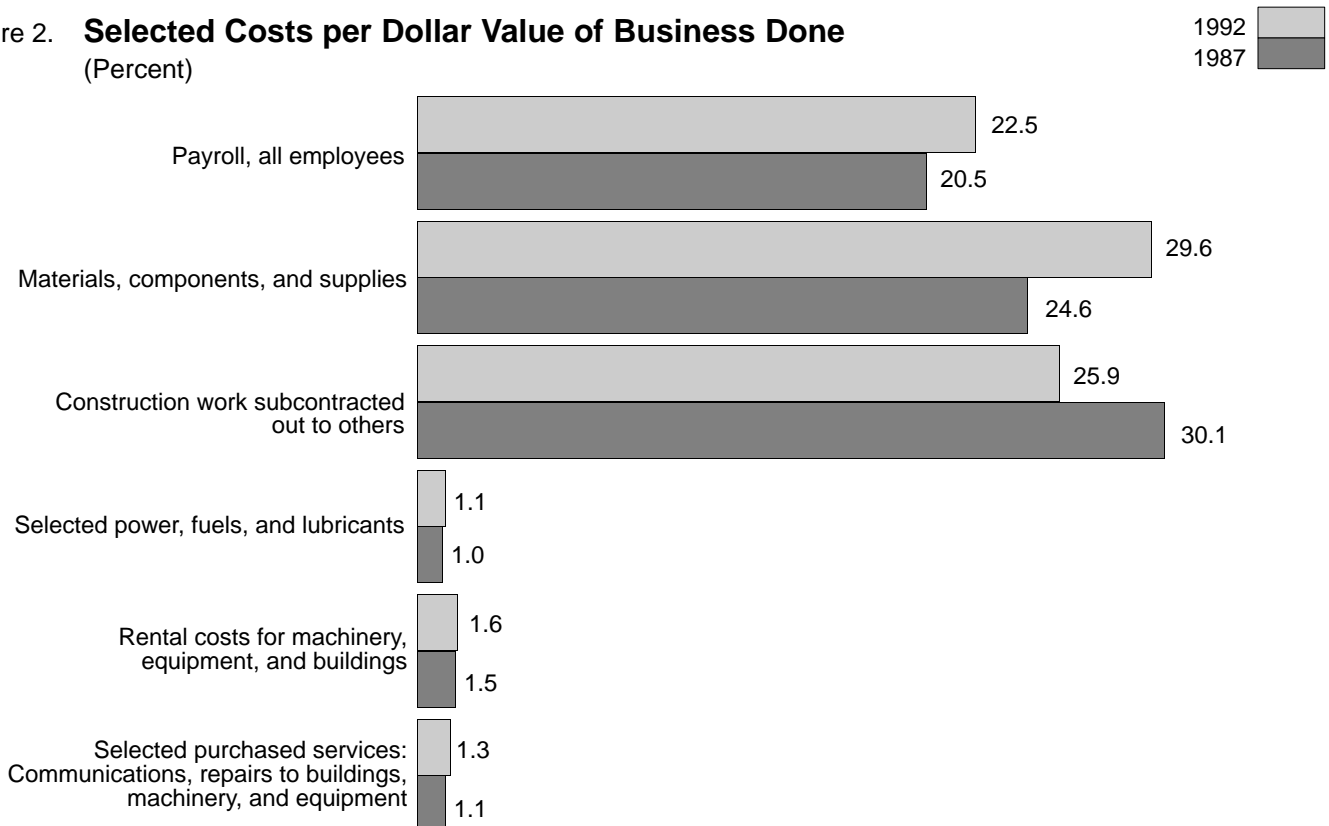


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	6 830	5 237	32 394	5 087 683	4 349	4 274	137 225	2 481	963	32 394	4 950 458	1	(Z)
15	Building construction—General contractors and operative builders ----	1 682	1 072	11 244	2 331 001	767	726	47 526	915	(S)	11 244	2 283 475	2	2
16	Heavy construction other than building construction—contractors -----	170	81	4 876	988 919	48	49	1 538	122	32	4 876	987 381	1	1
17	Special trade contractors -----	4 978	4 085	16 274	1 767 763	3 534	3 499	88 161	1 444	586	16 274	1 679 602	1	1
1711	Plumbing, heating, and air-conditioning --	526	365	2 716	347 362	275	276	9 667	251	89	2 716	337 695	3	3
1731	Electrical work -----	569	362	3 081	337 007	299	294	9 076	270	(S)	3 081	327 931	2	2
	1987													
15, 16, 17	Construction industries² -----	5 796	4 310	21 706	3 233 759	3 905	3 854	270 626	1 891	456	21 706	2 963 133	1	1
15	Building construction—General contractors and operative builders ----	1 346	828	(D)	(D)	726	686	62 889	620	142	(D)	(D)	(D)	(D)
16	Heavy construction other than building construction—contractors -----	136	44	2 745	402 471	27	28	2 157	109	16	2 745	400 314	2	1
17	Special trade contractors -----	4 123	3 275	(D)	(D)	3 008	2 979	124 235	1 115	296	(D)	(D)	(D)	(D)
1711	Plumbing, heating, and air-conditioning --	455	326	2 083	222 711	261	259	15 652	194	67	2 083	207 059	3	2
1731	Electrical work -----	483	321	1 949	215 809	262	255	14 481	221	66	1 949	201 328	4	3

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
		A	B	C	D	E	F	G	H
15, 16, 17	Construction industries¹ -----	2 481	32 394	24 651	1 112 471	780 394	4 833 246	3 551 632	2 148 283
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	564	3 311	2 460	91 147	63 175	502 353	336 294	205 806
1522	Other residential buildings -----	47	2 696	2 056	98 415	70 568	569 705	(D)	169 016
1531	Operative builders -----	54	707	485	25 723	16 304	208 746	134 931	59 158
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	32	819	581	33 294	20 374	165 414	94 682	61 989
1542	Nonresidential buildings, n.e.c. -----	218	3 711	2 669	140 808	90 944	813 594	432 075	218 345
16	Heavy construction other than building construction— contractors:								
1611	Highway and street construction -----	43	3 112	2 452	139 030	96 974	647 353	487 203	286 912
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	23	565	460	23 127	15 848	91 978	73 091	51 684
1629	Heavy construction, n.e.c. -----	54	972	712	32 498	21 989	149 479	113 860	90 175
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	251	2 716	1 877	101 857	67 567	331 053	298 729	177 496
1721	Painting and paper hanging -----	162	1 539	1 273	47 034	36 631	112 046	103 754	76 558
1731	Electrical work -----	270	3 081	2 364	98 027	68 850	326 173	312 081	194 537
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	72	639	561	17 260	(D)	63 831	62 316	42 491
1742	Plastering, drywall, and insulation work -----	94	1 452	1 185	52 637	42 090	130 474	125 301	78 387
1743	Terrazzo, tile, marble, and mosaic work -----	40	341	280	11 138	7 902	35 545	34 296	21 800
175	Carpentry and floor work:								
1751	Carpentry -----	90	932	787	29 407	22 076	83 619	75 877	49 055
1752	Floor laying and other floor work -----	61	393	289	11 180	7 729	39 675	38 615	22 428
1761	Roofing, siding, and sheet metal work -----	133	1 259	946	33 392	24 139	129 677	121 008	74 433
1771	Concrete work -----	64	595	484	17 148	12 423	59 722	54 503	35 890
1781	Water well drilling -----	7	79	58	(D)	1 851	(D)	(D)	(D)
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	19	496	416	23 386	18 920	77 119	70 644	51 579
1793	Glass and glazing work -----	42	422	273	12 008	8 039	47 849	46 679	26 144
1794	Excavation work -----	22	269	222	9 761	7 386	42 619	36 198	24 115
1795	Wrecking and demolition work -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	19	922	729	20 136	16 095	67 345	66 708	48 914
1799	Special trade contractors, n.e.c. -----	95	(D)	(D)	(D)	18 325	(D)	79 866	54 934

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
1 520 561	1 281 614	1 337 082	81 560	69 589	629 436	21 706	2 849 780	1 288 730	1	1	4	15, 16, 17
												15
139 942 (D)	166 059 (D)	28 540 8 127	7 664 7 847	3 900 4 122	39 854 (D)	1 910 2 621	273 734 627 441	114 574 129 294	5 3	7 (D)	13 4	152 1521 1522
79 390 (S)	73 815 70 733 381 519	321 *6 149 17 039	1 313 (S) 6 868	1 414 1 060 6 849	10 557 19 393 70 733	(D) 373 2 825	(D) 73 971 516 841	8 556 28 240 188 830	3	3	(Z)	1531
												154 1541 1542
												16
241 673 (D)	160 150 (D)	107 779 —	17 625 (D)	16 412 —	137 916 (D)	1 110 —	166 074 —	83 007 —	2 (D)	1 (D)	3 —	1611 162 1622 1623 1629
22 477 47 041	18 887 35 620	16 995 (D)	1 252 4 195	1 621 7 607	33 314 55 517	626 1 009	76 797 119 633	40 167 64 891	3 6	2 7	(Z) 22	17
127 874	32 324	229 365	7 972	3 539	35 385	2 083	204 342	126 024	3	3	12	1711
27 272	8 292	63 721	1 967	937	14 917	1 295	83 159	65 566	5	3	16	1721
119 302	14 092	256 734	6 452	6 418	39 946	1 949	198 600	117 010	2	2	5	1731
19 902 48 336 12 763	1 516 5 173 (S)	60 305 119 420 30 496	755 (S) 177	1 003 1 390 400	8 281 12 639 2 174	581 797 311	40 626 60 598 27 363	28 160 42 422 17 024	8 5 10	9 4 7	20 7 28	174 1741 1742 1743
28 159 16 563	7 742 1 060	51 824 26 016	697 469	469 *573	(S) 3 602	509 223	42 634 20 414	22 003 10 516	8 11	6 9	13 45	175 1751 1752
47 862 (D)	8 668 *5 219	56 199 43 440	4 152 1 075	1 487 2 013	11 646 13 223	997 192	78 178 15 599	50 739 8 476	7 9	5 9	20 35	1761 1771
6 919 (D)	767 6 475 *1 170 6 421 (D) (D) 19 080 (D)	1 821 63 436 30 758 15 027 (D) (D) 22 324 42 405	(D) 1 162 1 199 1 311 (D) (D) 708 2 562	(D) 537 415 2 235 (D) (D) (S)	8 346 10 008 3 848 11 955 (D) (D) 4 042 13 992	(D) 458 236 158 26 331 639	(D) 46 755 22 510 29 426 2 636 35 064 43 621	(D) 35 178 13 149 *19 336 2 413 24 533 29 302	(Z) (D) (D) (D) (D)	(D) (D) (D) (D) (D)	(D) (D) (D) (D) (D)	1781 179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	2 481	1 891	1 861	1 732	1	2	3	4
Proprietors and working partners	963	456	396	530	4	9	11	12
All employees**	32 394	21 706	18 665	20 792	1	1	1	2
Construction workers:								
March	24 533	16 319	14 789	15 808	1	2	2	2
May	24 179	16 637	14 317	16 516	1	1	2	2
August	24 911	17 091	12 977	16 798	1	1	2	2
November	24 983	16 281	12 915	13 955	1	1	2	3
Average	24 651	16 582	13 953	15 784	1	1	1	2
Other employees:								
March	7 835	4 861	4 711	5 032	1	2	2	4
May	7 611	5 151	(NA)	(NA)	1	2	(NA)	(NA)
August	7 715	5 283	(NA)	(NA)	1	2	(NA)	(NA)
November	7 810	5 202	(NA)	(NA)	2	2	(NA)	(NA)
Average	7 743	5 124	(NA)	(NA)	1	2	(NA)	(NA)
Payroll, all employees	1 112 471	606 858	409 679	323 402	1	1	1	2
Payroll, construction workers	780 394	435 959	297 885	240 359	1	1	1	2
Payroll, other employees	332 077	170 899	111 794	83 043	1	1	1	3
First-quarter payroll, all employees	260 464	135 520	101 744	78 382	1	1	1	2
Fringe benefits, all employees	406 556	185 337	93 091	101 245	1	1	1	1
Legally required expenditures	254 206	114 401	68 705	37 076	1	1	1	2
Voluntary expenditures	152 351	70 936	24 386	64 170	1	2	1	1
Dollar value of business done	4 950 458	2 963 133	1 853 343	1 435 157	(Z)	1	1	1
Value of construction work	4 833 246	2 849 780	1 785 660	1 329 495	1	1	1	1
Value of construction work subcontracted in from others	1 337 082	612 224	425 754	303 490	2	3	3	(Z)
Other business receipts	117 212	89 448	49 174	105 662	2	3	3	7
Net value of construction†	3 551 632	1 958 320	1 261 905	962 065	1	1	1	1
Value added††	2 148 283	1 288 730	855 164	636 173	1	1	1	2
Selected costs	2 802 175	1 650 498	979 670	744 283	1	2	1	1
Materials, components, and supplies	1 466 720	728 047	418 874	361 304	1	1	1	1
Construction work subcontracted out to others	1 281 614	891 460	523 754	367 430	1	2	1	2
Selected power, fuels, and lubricants	53 841	30 990	37 041	15 549	2	1	1	3
Electricity	11 109	4 629	16 193	2 881	5	3	1	5
Natural gas	1 319	1 170	275	436	6	2	7	13
Gasoline and diesel fuel	35 889	23 187	18 558	10 177	3	1	2	3
On highway use	24 983	17 354	(NA)	(NA)	3	1	(NA)	(NA)
Off highway use	10 905	5 832	(NA)	(NA)	4	2	(NA)	(NA)
Other, including lubricating oils and greases	5 525	2 003	2 013	2 055	1	5	3	7
Rental cost for machinery, equipment, and buildings	81 560	45 349	28 527	20 603	3	3	3	1
For machinery and equipment	45 543	25 169	17 135	13 861	4	3	4	1
For buildings	36 017	20 179	11 392	6 743	4	3	4	2
Selected purchased services	63 323	34 017	25 875	18 333	2	2	3	3
Communication services	15 544	7 431	5 072	3 855	5	4	6	4
Repairs to buildings and other structures	3 405	2 071	1 801	1 145	7	15	2	8
Repairs to machinery and equipment	44 374	24 514	19 001	13 333	2	2	3	3
Ownership of construction projects:								
Value of construction work	4 833 246	2 849 780	1 785 660	1 329 495	1	1	1	1
Government owned	1 517 610	816 362	499 385	439 607	1	2	2	1
Federal	253 196	295 159	(NA)	(NA)	3	4	(NA)	(NA)
State and local	1 264 414	521 203	(NA)	(NA)	1	2	(NA)	(NA)
Privately owned	3 315 636	2 033 417	1 286 274	889 888	2	2	1	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	583 668	291 868	1	1
Capital expenditures, other than land -----	69 589	44 550	4	3
New -----	57 071	31 911	4	4
Used -----	12 519	12 638	5	3
Retirements and disposition of depreciable assets -----	23 822	37 214	9	2
End-of-year gross book value of depreciable assets -----	629 436	299 204	1	2
Depreciation charges during year -----	66 513	31 934	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	115 031	74 455	4	4
Capital expenditures, other than land -----	9 270	12 659	18	5
New buildings and other structures -----	8 606	9 100	19	7
Used buildings and other structures -----	664	3 559	29	4
Retirements and disposition of depreciable assets -----	840	4 440	24	14
End-of-year gross book value of depreciable assets -----	123 460	82 673	4	3
Depreciation charges during year -----	7 603	5 791	6	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	468 637	217 413	1	2
Capital expenditures, other than land -----	60 320	31 890	4	4
New machinery and equipment, including automobiles and trucks -----	48 465	22 810	4	5
New automobiles and trucks, intended primarily for highway use -----	13 639	10 834	6	7
Used machinery and equipment, including automobiles and trucks -----	11 855	9 079	5	4
Retirements and disposition of depreciable assets -----	22 982	32 774	9	1
End-of-year gross book value of depreciable assets -----	505 975	216 530	1	2
Depreciation charges during year -----	58 909	26 143	2	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	2 481	1
Value of construction work	4 833 246	1
Establishments with inventories:		
Number	993	4
Value of construction work	2 163 140	1
Inventories ¹ :		
End of 1992, materials and supplies	44 688	4
End of 1991, materials and supplies	40 042	6
Establishments with no inventories:		
Number	766	5
Value of construction work	2 146 035	1
Establishments not reporting:		
Number	723	4
Value of construction work	524 071	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	2 481	1 296	528	340	216	53	35	9	2	2	
All employees** -----	32 394	2 665	3 489	4 494	6 253	3 591	5 030	2 860	4 013	(D)	
Payroll, all employees -----	1 112 471	54 294	88 858	144 813	233 113	140 934	199 784	96 292	154 382	(D)	
Dollar value of business done -----	4 950 458	318 203	379 577	629 458	816 485	541 102	851 992	456 155	957 486	(D)	
Value of construction work -----	4 833 246	315 614	370 445	620 351	790 577	531 728	794 848	454 296	955 386	(D)	
Net value of construction work† -----	3 551 632	241 616	288 169	481 977	658 507	393 788	606 965	329 973	550 638	(D)	
Value added†† -----	2 148 283	147 400	185 537	295 621	456 773	275 888	378 965	186 099	221 999	(D)	
Cost of materials, components, supplies, and fuels -----	1 520 561	96 804	111 764	195 462	227 641	127 274	285 144	145 733	330 739	(D)	
Cost of construction work subcontracted out to others -----	1 281 614	73 999	82 276	138 375	132 071	137 940	187 883	124 323	404 748	(D)	
Rental cost for machinery, equipment, and buildings -----	81 560	4 293	7 240	14 872	15 491	9 838	9 692	20 134	(D)	(D)	
Capital expenditures, other than land -----	69 589	4 648	5 363	13 442	12 794	5 399	15 122	7 501	5 320	(D)	
End-of-year gross book value of depreciable assets -----	629 436	33 511	34 859	81 526	120 889	81 213	166 315	43 624	67 498	(D)	
1987											
All employees** -----	21 706	2 102	2 527	3 098	5 069	3 109	3 159	2 639	(D)	(D)	
Value of construction work -----	2 849 780	239 493	246 876	293 530	614 757	416 506	1 038 616	(D)	(D)	(D)	
Value added†† -----	1 288 730	128 108	121 071	163 523	319 449	442 116	(D)	114 461	(D)	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	7	8	5	3	(Z)	(Z)	(Z)	(Z)	(D)	
Net value of construction work† -----	1	8	8	6	1	(Z)	(Z)	(Z)	(Z)	(D)	
Capital expenditures, other than land -----	4	17	18	17	4	(Z)	(Z)	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	2 481	(S)	(S)	214	(S)	474	398	341	150	91	75
All employees** -----	32 394	(S)	(S)	376	(S)	2 154	2 727	4 787	3 751	4 232	12 761
Payroll, all employees -----	1 112 471	(S)	(S)	4 790	(S)	45 584	71 408	147 777	139 027	156 154	522 502
Dollar value of business done -----	4 950 458	(S)	(S)	15 188	(S)	168 888	285 272	531 532	530 469	620 003	2 698 919
Value of construction work -----	4 833 246	(S)	(S)	14 781	(S)	167 730	279 828	517 829	518 934	603 896	2 630 983
Net value of construction work† -----	3 551 632	(S)	(S)	13 145	(S)	141 832	228 795	435 549	409 393	502 630	1 734 360
Value added†† -----	2 148 283	(S)	(S)	8 241	(S)	85 290	141 954	282 146	274 249	334 517	967 474
Cost of materials, components, supplies, and fuels -----	1 520 561	(S)	(S)	5 311	(S)	57 700	92 284	167 106	146 681	184 220	834 822
Cost of construction work subcontracted out to others -----	1 281 614	(S)	(S)	(S)	(S)	25 898	51 033	82 280	109 540	101 266	896 623
Rental cost for machinery, equipment, and buildings -----	81 560	(S)	(S)	*462	(S)	3 783	7 004	12 193	9 747	8 965	37 407
Capital expenditures, other than land -----	69 589	(S)	(S)	*513	(S)	3 431	4 320	10 619	9 658	8 028	31 612
End-of-year gross book value of depreciable assets -----	629 436	(S)	(S)	2 110	(S)	20 226	30 308	72 486	79 442	76 725	333 419
1987											
All employees** -----	21 706	(S)	(S)	(S)	1 572	1 552	2 201	3 219	3 331	2 376	7 046
Value of construction work -----	2 849 780	(S)	(S)	(S)	89 649	113 118	175 604	299 807	433 195	323 868	1 395 878
Value added†† -----	1 288 730	(S)	(S)	(S)	53 912	64 457	97 612	173 039	237 105	164 444	486 429
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	22	(S)	11	8	5	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	15	(S)	10	9	6	3	5	(Z)
Capital expenditures, other than land -----	4	(S)	(S)	59	(S)	22	16	23	1	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	4 833 246	3 265 251	951 695	426 272	1	1	2	4
Building construction	3 489 732	2 452 858	723 478	313 396	1	1	2	5
Single-family houses	1 119 883	844 785	187 963	87 135	3	3	7	9
Single-family houses, detached	830 676	602 436	161 423	66 816	4	5	8	10
Single-family houses, attached, including townhouses and townhouse-type condominiums	289 207	242 349	26 539	20 318	4	4	14	13
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	322 413	242 889	43 248	36 276	2	2	7	8
Other residential buildings, including hotels, motels, and tourist cabins	471 865	384 813	45 914	41 139	2	2	9	3
Office buildings	408 639	285 768	86 123	36 748	2	2	6	10
Other commercial buildings such as stores, restaurants, and automobile service stations	410 703	207 507	137 691	65 505	4	3	5	15
Industrial buildings and warehouses	331 394	232 261	82 590	16 543	1	1	3	7
Industrial buildings	244 266	168 827	64 861	10 578	1	1	3	7
Warehouses	87 128	63 433	17 730	5 965	3	4	7	7
Educational buildings	169 714	89 787	64 689	15 238	3	2	8	7
Hospitals and institutional buildings	108 427	51 085	50 085	7 256	7	6	10	9
Amusement, social, and recreational buildings, indoors	100 111	102 406	2 101	3 604	3	2	22	9
Other nonresidential buildings	46 583	26 360	14 769	5 454	5	7	6	21
Nonbuilding construction	1 153 486	812 392	228 217	112 876	1	1	2	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	474 882	311 713	114 085	49 084	1	1	(Z)	8
Airport runways and related work	29 044	20 319	4 701	4 025	(Z)	(Z)	(Z)	(Z)
Private driveways and parking areas	68 104	(D)	(D)	(D)	10	(D)	(D)	(D)
Bridges, tunnels, and elevated highways	108 505	105 115	(D)	(D)	2	2	(D)	(D)
Conservation and development construction	36 686	(D)	(D)	6 833	21	(D)	(D)	21
Power and communication transmission lines, towers, and related facilities	134 580	114 424	10 343	(S)	1	(Z)	10	(S)
Sewers, water mains, and related facilities	96 866	64 789	13 867	18 209	3	4	2	1
Sewers, sewer lines, septic systems, and related facilities	56 565	30 713	12 071	13 780	4	8	2	1
Water mains and related facilities	40 301	34 076	1 796	4 429	3	3	1	1
Sewage treatment and water treatment plants	49 608	39 819	5 974	3 815	(Z)	(Z)	(Z)	(Z)
Other nonbuilding construction	155 211	127 527	(D)	(D)	2	2	(D)	(D)
Construction work, n.s.k.	190 028	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1987								
Value of construction work	2 849 780	1 884 614	619 874	244 023	1	2	2	2
Building construction	2 240 459	1 518 901	516 723	184 617	2	2	3	3
Single-family houses	511 574	386 183	83 677	41 713	5	7	6	8
Single-family houses, detached	411 668	307 567	72 439	31 661	6	8	7	9
Single-family houses, attached, including townhouses and townhouse-type condominiums	99 906	78 616	11 238	10 052	12	15	15	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	92 184	60 131	12 124	19 928	3	2	6	13
Other residential buildings, including hotels, motels, and tourist cabins	470 519	341 787	102 463	26 268	1	1	1	4
Office buildings	345 845	236 993	81 914	26 937	3	3	6	4
Other commercial buildings such as stores, restaurants, and automobile service stations	262 850	139 360	99 158	24 330	3	5	6	9
Industrial buildings and warehouses	261 403	202 957	44 087	14 358	3	3	9	6
Industrial buildings	208 418	159 894	37 526	10 998	3	3	10	7
Warehouses	52 985	43 063	6 561	3 360	7	8	9	9
Educational buildings	96 189	54 072	22 501	19 595	3	4	3	10
Hospitals and institutional buildings	106 707	50 174	48 236	8 295	3	4	3	15
Amusement, social, and recreational buildings, indoors	22 720	15 714	3 524	3 481	2	2	11	6
Other nonresidential buildings	70 488	46 742	19 770	3 986	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	508 054	350 500	102 420	55 132	1	1	2	5
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	171 276	123 837	29 317	18 122	1	1	2	3
Bridges, tunnels, and elevated highways	9 430	8 637	*440	352	10	6	68	37
Sewers, water mains, and related facilities	81 043	62 416	13 314	5 312	3	1	17	9
Sewers, sewer lines, septic systems, and related facilities	40 368	29 595	7 583	3 189	4	2	18	15
Water mains and related facilities	40 675	32 821	5 731	2 123	2	1	15	1
Sewage treatment and water treatment plants	22 834	20 185	*1 046	1 603	3	(Z)	44	21
Other nonbuilding construction	223 471	135 425	58 303	29 743	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	101 266	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. **Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December	A	B	C	D	E	F
				C	D	E	F						
15, 16, 17	Construction industries -----	2 481	24 651	24 533	24 179	24 911	24 983	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	564	2 460	2 322	2 405	2 452	2 661	6	5	6	6	6	8
1522	Other residential buildings -----	47	2 056	2 161	2 053	2 003	2 008	24	3	1	2	4	7
1531	Operative builders -----	54	485	381	443	561	555	20	4	3	2	4	3
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	32	581	584	646	546	550	14	7	6	9	7	12
1542	Nonresidential buildings, n.e.c. -----	218	2 669	2 476	2 429	2 746	3 026	11	3	3	3	3	6
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	43	2 452	2 528	2 478	2 462	2 341	19	1	1	1	3	1
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	2	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	23	460	428	460	476	478	11	2	2	2	2	1
1629	Heavy construction, n.e.c. -----	54	712	697	765	697	690	14	6	6	5	5	7
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	251	1 877	1 872	1 893	1 842	1 902	4	3	3	3	4	4
1721	Painting and paper hanging -----	162	1 273	1 229	1 246	1 407	1 210	4	5	6	6	6	5
1731	Electrical work -----	270	2 364	2 463	2 297	2 400	2 296	4	2	3	3	3	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	72	561	582	518	564	578	11	8	8	10	10	11
1742	Plastering, drywall, and insulation work -----	94	1 185	1 229	1 149	1 163	1 200	9	6	5	5	6	5
1743	Terrazzo, tile, marble, and mosaic work -----	40	280	251	300	311	256	21	9	8	9	8	9
175	Carpentry and floor work:												
1751	Carpentry -----	90	787	702	808	914	723	11	9	11	10	9	8
1752	Floor laying and other floor work -----	61	289	302	280	281	292	8	12	12	12	11	12
1761	Roofing, siding, and sheet metal work -----	133	946	981	861	916	1 027	7	7	10	8	8	9
1771	Concrete work -----	64	484	467	482	475	511	17	9	9	9	10	10
1781	Water well drilling -----	7	58	55	64	60	51	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	19	416	468	384	405	406	10	9	8	9	9	9
1793	Glass and glazing work -----	42	273	312	258	255	267	15	11	10	13	13	13
1794	Excavation work -----	22	222	235	239	204	210	4	(Z)	(Z)	(Z)	(Z)	(Z)
1795	Wrecking and demolition work -----	3	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	19	729	790	644	711	772	9	4	4	5	5	4
1799	Special trade contractors, n.e.c. -----	95	(D)	(D)	(D)	(D)	(D)	16	(D)	(D)	(D)	(D)	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	13.1	34.3	196.1	.230	.315	.265	.277	.017
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	5.9	27.5	204.2	.181	.279	.331	.057	.015
1522	Other residential buildings -----	57.0	36.5	277.1	.173	(D)	(D)	.014	.014
1531	Operative builders -----	13.2	36.4	430.4	.123	.380	.354	.002	.006
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	25.7	40.7	284.7	.201	(S)	.428	*.037	(S)
1542	Nonresidential buildings, n.e.c. -----	17.1	37.9	304.8	.173	.271	.469	.021	.008
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	71.6	44.7	264.0	.215	.373	.247	.166	.027
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	24.3	40.9	200.0	.251	.244	.205	.185	.014
1629	Heavy construction, n.e.c. -----	18.1	33.4	209.9	.217	.315	.238	(D)	.028
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	10.8	37.5	176.4	.308	.386	.098	.693	.024
1721	Painting and paper hanging -----	9.5	30.6	88.0	.420	.243	.074	.569	.018
1731	Electrical work -----	11.4	31.8	138.0	.301	.366	.043	.787	.020
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	8.9	27.0	113.8	.270	.312	.024	.945	.012
1742	Plastering, drywall, and insulation work -----	15.4	36.3	110.1	.403	.370	.040	.915	(S)
1743	Terrazzo, tile, marble, and mosaic work -----	8.6	32.7	126.9	.313	.359	(S)	.858	.005
175	Carpentry and floor work:								
1751	Carpentry -----	10.4	31.6	106.3	.352	.337	.093	.620	.008
1752	Floor laying and other floor work -----	6.5	28.4	137.3	.282	.417	.027	.656	.012
1761	Roofing, siding, and sheet metal work -----	9.4	26.5	137.1	.257	.369	.067	.433	.032
1771	Concrete work -----	9.3	28.8	123.4	.287	(D)	.087	.727	.018
1781	Water well drilling -----	11.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	25.6	47.1	185.4	.303	(D)	.084	.823	.015
1793	Glass and glazing work -----	10.0	28.5	175.3	.251	.470	*.024	.643	.025
1794	Excavation work -----	12.5	36.3	192.0	.229	.289	.151	.353	.031
1795	Wrecking and demolition work -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	48.5	21.8	92.4	.299	.283	.009	.331	.011
1799	Special trade contractors, n.e.c. -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	HONOLULU, HI MSA											
15,16,17	Construction industries	1 545	25 559	912 346	3 903 203	2 842 568	1 722 723	1 199 077	1 060 635	50 195	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	316	2 086	54 351	282 000	189 947	128 952	68 196	92 053	1 790	6	7
1522	Other residential buildings	29	2 472	92 870	(D)	(D)	160 961	(D)	(D)	(D)	2	(D)
1531	Operative builders	(S)	(D)	(D)	94 006	(D)	(D)	(D)	(D)	(D)	(D)	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	21	732	29 571	155 581	86 558	57 169	(S)	69 023	719	5	2
1542	Nonresidential buildings, n.e.c.	154	3 178	125 293	721 944	379 386	186 211	198 641	342 559	5 014	3	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	32	2 730	124 300	586 134	443 796	254 663	227 745	142 338	13 729	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1623	Water, sewer, and utility lines	12	319	14 743	64 123	48 072	35 330	12 813	16 051	946	6	3
1629	Heavy construction, n.e.c.	22	423	14 046	55 568	40 258	29 164	13 927	15 310	2 305	8	8
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	141	2 142	85 260	268 591	241 378	146 284	101 474	27 213	3 001	3	3
1721	Painting and paper hanging	106	1 217	37 854	90 964	83 274	60 981	22 327	7 690	694	6	3
1731	Electrical work	179	2 367	79 288	262 881	250 362	156 018	95 726	12 519	5 536	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	52	563	15 556	54 682	53 254	35 500	17 831	1 428	931	9	10
1742	Plastering, drywall, and insulation work	(S)	1 248	48 050	115 620	111 409	69 775	43 000	(S)	1 088	6	4
1743	Terrazzo, tile, marble, and mosaic work	21	201	(D)	(D)	(D)	(D)	7 592	208	146	9	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	732	24 523	68 783	62 460	40 185	23 582	6 323	(D)	9	6
1752	Floor laying and other floor work	42	312	9 513	33 782	32 902	18 536	14 570	880	*563	9	7
1761	Roofing, siding, and sheet metal work	96	1 009	28 230	102 551	97 695	61 364	36 617	4 856	865	6	5
1771	Concrete work	35	420	12 919	40 107	38 652	26 080	12 768	1 454	644	8	8
1781	Water well drilling	3	72	2 815	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	16	440	21 507	72 262	66 621	47 745	22 435	5 641	(D)	8	7
1793	Glass and glazing work	24	317	9 106	38 058	(D)	19 983	17 210	(D)	*337	17	(D)
1794	Excavation work	15	194	7 234	33 571	(D)	18 531	10 346	(D)	(D)	(Z)	(D)
1795	Wrecking and demolition work	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	16	(D)	20 032	67 131	(D)	48 765	19 020	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	60	902	24 566	73 117	67 640	45 146	25 631	5 477	(D)	11	9

HI-14 HAWAII

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Contents

Oregon

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Oregon. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 25,996 establishments in this State operating in the construction industries. These establishments accounted for \$7.0 billion in total dollar value of business done.

Most of the 25,996 construction establishments were small. Of the total, 17,365 were nonemployers, and over half of the employer establishments had less than 5 employees. The 2,807 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 72 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$6.3 billion in total dollar value of business done. Of this amount, \$6.1 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.6 billion, leaving net value of construction work of \$4.5 billion. In addition, these establishments paid out \$2.2 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$2.7 billion. (See Introduction and appendixes for explanation of terms.)

There were 8,631 establishments with total employment averaging 53,212 during the year. Total payroll for 1992 was \$1.4 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 17,365 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$708 million. Most of these establishments, about 72 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

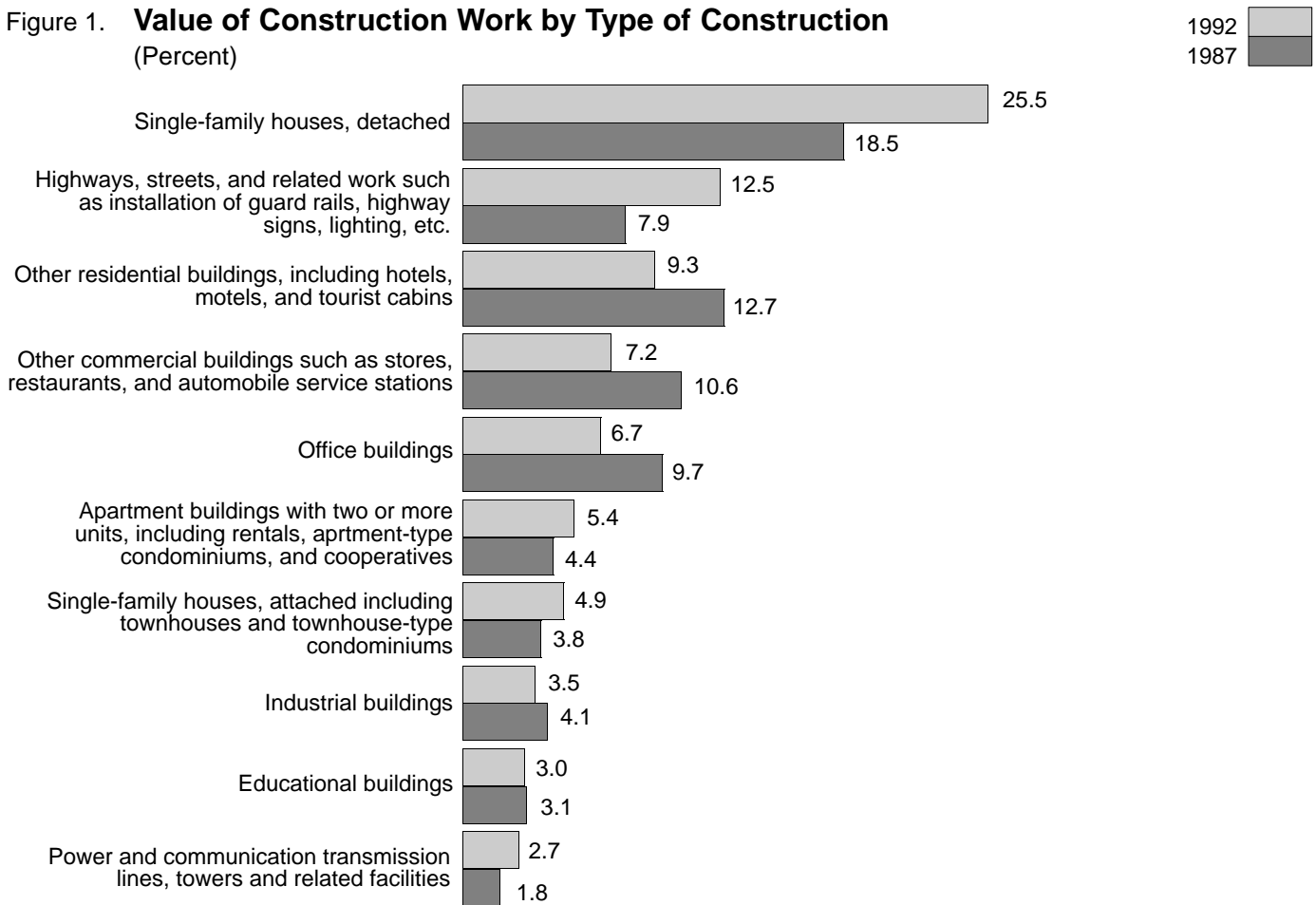


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

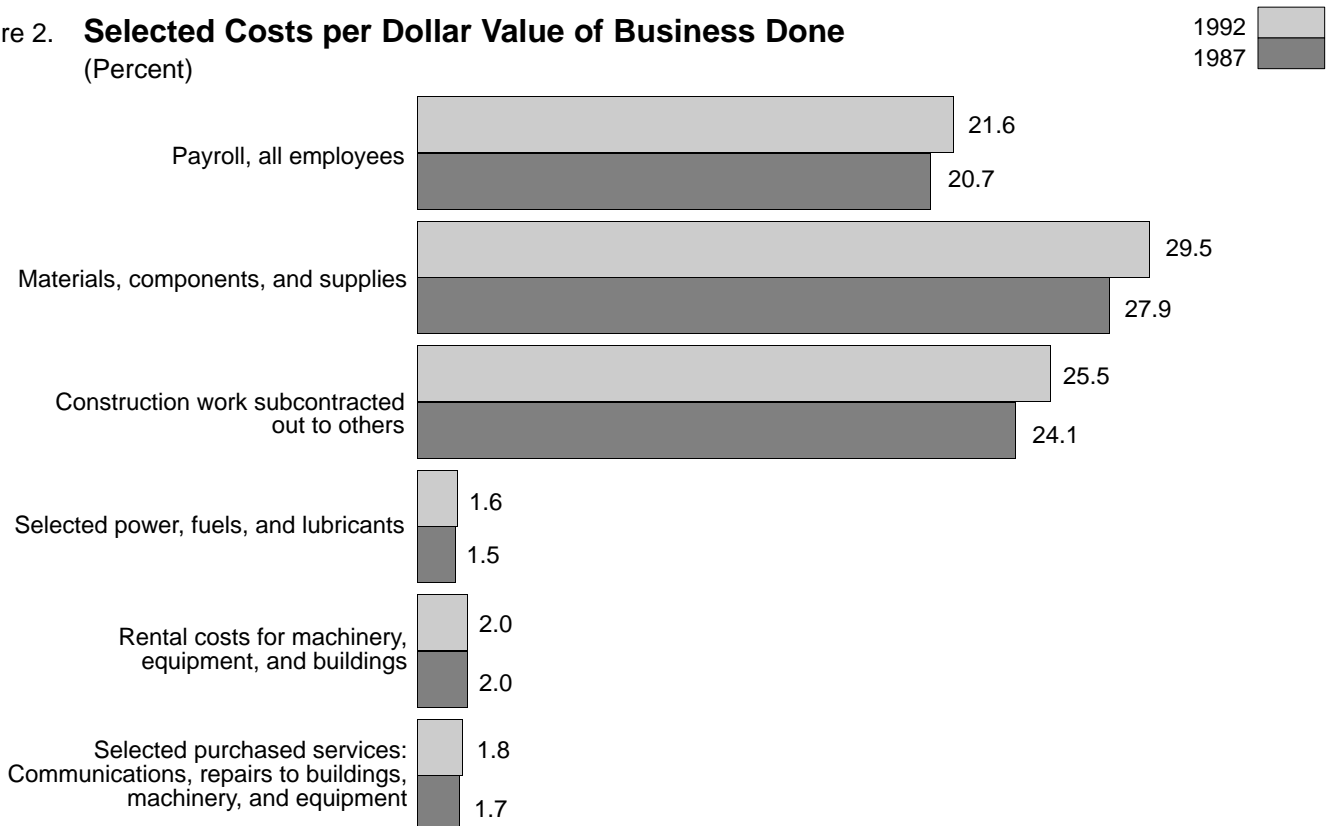


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	25 996	19 929	53 212	6 988 085	17 365	16 805	707 764	8 631	3 124	53 212	6 280 321	1	1
15	Building construction—General contractors and operative builders ----	7 395	5 167	13 678	2 955 627	4 553	4 238	345 831	2 842	929	13 678	2 609 796	3	3
16	Heavy construction other than building construction—contractors -----	957	417	7 710	1 038 073	293	266	11 763	664	(S)	7 710	1 026 310	2	2
17	Special trade contractors -----	17 643	14 345	31 824	2 994 385	12 519	12 301	350 170	5 124	2 044	31 824	2 644 215	1	1
1711	Plumbing, heating, and air-conditioning --	1 398	857	7 071	732 375	596	575	26 308	802	282	7 071	706 067	3	2
1731	Electrical work -----	1 135	642	5 672	542 643	498	478	15 921	637	164	5 672	526 722	2	2
	1987													
15, 16, 17	Construction industries² -----	21 898	16 901	38 504	4 564 219	15 429	15 285	764 384	6 469	1 616	38 504	3 799 835	1	1
15	Building construction—General contractors and operative builders ----	6 274	4 480	9 189	1 702 532	4 284	4 082	293 914	1 990	398	9 189	1 408 618	4	3
16	Heavy construction other than building construction—contractors -----	869	449	5 625	753 989	338	332	55 581	531	117	5 625	698 408	3	3
17	Special trade contractors -----	14 327	11 612	23 471	1 973 811	10 473	10 541	327 371	3 854	1 071	23 471	1 646 440	2	2
1711	Plumbing, heating, and air-conditioning --	1 233	799	4 632	413 885	601	604	31 059	632	195	4 632	382 826	3	3
1731	Electrical work -----	1 108	718	4 214	336 013	594	594	20 640	514	124	4 214	315 373	5	3

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹ -----	8 631	53 212	40 854	1 354 875	982 628	6 141 153	4 538 490	2 720 742
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	1 868	6 295	4 492	113 140	76 786	737 044	495 776	266 354
1522	Other residential buildings -----	148	947	726	24 080	17 207	117 189	64 013	38 951
1531	Operative builders -----	312	890	459	21 922	9 457	330 511	209 530	110 618
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	109	1 377	976	45 515	24 980	430 672	170 020	118 621
1542	Nonresidential buildings, n.e.c. -----	406	4 170	3 003	126 078	79 629	927 207	376 048	208 972
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	244	2 652	2 167	74 389	56 539	342 873	281 363	158 185
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	7	253	203	9 502	7 118	57 545	38 059	22 909
1623	Water, sewer, and utility lines -----	174	2 547	2 101	78 770	61 708	280 493	248 435	177 293
1629	Heavy construction, n.e.c. -----	239	2 258	1 792	68 042	49 537	317 253	254 119	168 497
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	802	7 071	5 266	208 954	153 494	697 771	617 747	343 211
1721	Painting and paper hanging -----	480	2 029	1 684	35 097	28 204	94 838	92 175	63 081
1731	Electrical work -----	637	5 672	4 290	184 213	140 178	521 016	504 625	316 274
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	248	1 161	994	25 511	20 500	76 120	73 418	41 462
1742	Plastering, drywall, and insulation work -----	349	2 772	2 314	64 249	51 312	179 089	166 502	111 101
1743	Terrazzo, tile, marble, and mosaic work -----	85	253	205	5 127	4 232	18 128	17 935	10 009
175	Carpentry and floor work:								
1751	Carpentry -----	583	2 104	1 694	39 427	30 365	175 053	148 259	86 472
1752	Floor laying and other floor work -----	181	670	502	12 999	8 797	56 026	52 029	26 628
1761	Roofing, siding, and sheet metal work -----	429	2 776	2 158	56 259	38 569	230 457	215 278	120 731
1771	Concrete work -----	361	2 103	1 699	50 462	38 491	168 068	156 900	97 215
1781	Water well drilling -----	59	259	207	4 605	3 418	18 376	17 771	9 220
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	62	651	565	13 944	10 988	56 236	46 678	27 842
1793	Glass and glazing work -----	64	394	238	10 089	5 916	39 906	(D)	(D)
1794	Excavation work -----	261	1 083	864	23 922	18 969	94 319	87 174	60 924
1795	Wrecking and demolition work -----	12	118	96	1 833	1 429	7 803	7 506	5 824
1796	Installing building equipment, n.e.c. -----	81	769	599	20 449	15 984	50 449	47 912	37 294
1799	Special trade contractors, n.e.c. -----	428	1 940	1 558	36 299	28 819	116 711	(D)	(D)

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
1 956 915	1 602 663	1 843 564	125 228	101 984	777 533	38 504	3 675 649	1 739 743	1	1	6	15, 16, 17
												15
250 109	241 267	38 693	8 665	8 540	47 275	3 673	329 129	128 055	5	5	15	152
29 224	53 175	(S)	442	*1 400	5 789	837	96 020	22 586	25	13	50	1521
113 827	120 981	351	427	1 434	17 570	397	126 024	38 836	11	17	30	1531
68 217	260 653	2 495	4 764	1 010	13 083	1 068	129 056	50 410	9	6	19	154
177 668	551 159	22 560	13 519	8 176	48 295	3 214	683 032	165 370	5	4	33	1542
												16
140 286	61 510	73 161	15 652	9 074	102 421	2 775	352 965	199 976	4	3	14	1611
(D)	19 486	2 250	3 400	1 576	5 830	421	55 915	22 370	(Z)	(Z)	12	162
72 556	32 057	63 239	16 778	12 368	88 879	1 458	126 868	64 772	4	4	13	1622
94 751	63 134	60 255	12 926	11 029	93 752	971	136 822	67 295	5	4	23	1623
												17
282 831	80 024	423 752	10 674	8 724	57 258	4 632	377 566	199 510	3	2	13	1711
29 310	2 663	62 143	2 273	2 364	15 454	1 620	71 186	53 067	7	6	24	1721
194 057	16 391	305 011	7 559	8 656	63 504	4 214	301 654	184 236	2	2	6	1731
32 125	2 702	57 226	1 474	761	8 751	663	40 335	25 279	7	6	31	174
58 957	12 587	144 250	2 756	1 965	13 456	2 032	102 970	64 388	5	5	31	1741
7 939	*193	16 962	*559	*569	2 203	(S)	(S)	(S)	14	20	58	1742
												175
64 296	26 794	101 225	2 077	*6 256	*21 878	1 206	59 322	35 517	8	8	67	1751
26 329	3 997	40 178	528	*916	6 691	594	53 709	26 435	10	9	57	1752
98 075	15 179	121 887	4 472	2 849	23 748	2 700	153 110	85 817	6	6	20	1761
(D)	11 168	121 361	4 166	4 313	51 604	1 508	86 577	54 399	7	6	15	1771
8 853	605	3 247	250	1 060	8 720	169	12 179	7 236	20	14	36	1781
19 659	*9 559	33 846	1 614	(S)	6 570	524	55 572	28 528	19	15	(S)	179
24 543	(D)	29 029	1 373	202	3 628	425	52 964	24 615	13	(D)	25	1791
28 093	7 145	51 462	3 896	4 409	46 736	672	61 790	45 261	9	8	21	1793
1 760	297	1 831	(S)	173	1 176	89	7 116	5 301	19	16	(Z)	1794
10 617	2 537	9 498	1 367	432	*6 756	829	62 380	44 394	9	5	1	1795
36 758	(D)	45 761	2 945	*2 811	16 509	1 270	79 769	49 720	9	(D)	47	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	8 631	6 469	6 075	7 273	1	1	2	3
Proprietors and working partners	3 124	1 616	2 172	4 624	3	6	5	5
All employees**	53 212	38 504	35 551	45 475	1	1	2	1
Construction workers:								
March	39 645	26 436	25 272	32 901	1	2	2	2
May	40 468	29 130	28 292	39 006	1	2	2	2
August	44 207	32 739	30 568	41 426	1	2	2	2
November	39 096	30 434	25 685	37 663	1	2	2	2
Average	40 854	29 685	28 157	37 786	1	1	2	2
Other employees:								
March	12 615	8 615	7 347	7 570	1	2	2	2
May	12 172	8 737	(NA)	(NA)	1	3	(NA)	(NA)
August	12 462	9 028	(NA)	(NA)	1	2	(NA)	(NA)
November	12 186	8 898	(NA)	(NA)	2	2	(NA)	(NA)
Average	12 359	8 819	(NA)	(NA)	1	2	(NA)	(NA)
Payroll, all employees	1 354 875	786 241	673 683	627 123	1	1	1	1
Payroll, construction workers	982 628	573 291	512 606	504 366	1	1	1	1
Payroll, other employees	372 247	212 950	161 077	122 757	1	2	1	1
First-quarter payroll, all employees	308 298	161 151	150 531	128 806	2	1	1	1
Fringe benefits, all employees	368 235	190 686	132 702	145 842	1	1	1	1
Legally required expenditures	233 002	133 157	100 869	86 238	2	2	1	1
Voluntary expenditures	135 233	57 528	31 833	59 604	2	2	2	1
Dollar value of business done	6 280 321	3 799 835	2 827 689	2 697 564	1	1	1	1
Value of construction work	6 141 153	3 675 649	2 751 886	2 566 932	1	1	1	1
Value of construction work subcontracted in from others	1 843 564	906 512	687 770	702 034	3	4	2	2
Other business receipts	139 168	97 705	60 347	130 632	5	6	4	4
Net value of construction†	4 538 490	2 759 695	2 038 079	1 980 424	1	1	1	1
Value added††	2 720 742	1 739 743	1 289 292	1 189 190	1	1	1	1
Selected costs	3 559 578	2 033 610	1 522 941	1 454 371	2	2	1	2
Materials, components, and supplies	1 854 120	1 059 183	756 372	823 188	2	2	1	2
Construction work subcontracted out to others	1 602 663	915 953	713 807	586 508	2	3	2	2
Selected power, fuels, and lubricants	102 795	58 474	52 761	44 675	2	2	2	2
Electricity	15 086	7 960	6 656	5 094	4	5	3	3
Natural gas	3 720	3 012	3 120	2 569	4	6	2	4
Gasoline and diesel fuel	77 831	43 654	39 543	30 817	2	2	2	2
On highway use	57 670	32 437	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use	20 161	11 217	(NA)	(NA)	3	4	(NA)	(NA)
Other, including lubricating oils and greases	6 158	3 846	3 440	6 197	5	5	5	4
Rental cost for machinery, equipment, and buildings	125 228	77 728	60 584	43 197	3	4	2	1
For machinery and equipment	91 152	56 560	46 127	36 381	3	4	2	1
For buildings	34 076	21 167	14 456	6 815	4	5	3	4
Selected purchased services	113 760	65 917	48 092	45 731	3	3	2	2
Communication services	34 614	17 759	13 926	10 585	3	3	4	3
Repairs to buildings and other structures	5 119	3 262	1 856	2 578	17	8	8	7
Repairs to machinery and equipment	74 027	44 895	32 309	32 569	3	3	2	2
Ownership of construction projects:								
Value of construction work	6 141 153	3 675 649	2 751 886	2 566 932	1	1	1	1
Government owned	1 541 648	869 876	741 111	496 803	4	5	3	2
Federal	358 820	285 143	(NA)	(NA)	7	5	(NA)	(NA)
State and local	1 182 828	584 733	(NA)	(NA)	4	7	(NA)	(NA)
Privately owned	4 599 506	2 805 772	2 010 775	2 070 129	2	2	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	706 775	436 137	3	3
Capital expenditures, other than land -----	101 984	61 510	6	5
New -----	71 462	37 516	8	5
Used -----	30 522	23 994	8	9
Retirements and disposition of depreciable assets -----	31 225	22 848	16	9
End-of-year gross book value of depreciable assets -----	777 533	474 799	3	3
Depreciation charges during year-----	89 114	53 301	3	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	74 060	76 235	10	7
Capital expenditures, other than land -----	12 613	6 626	29	15
New buildings and other structures -----	10 739	3 523	34	20
Used buildings and other structures -----	1 874	3 102	16	23
Retirements and disposition of depreciable assets -----	1 939	3 435	31	18
End-of-year gross book value of depreciable assets -----	84 734	79 426	11	7
Depreciation charges during year-----	6 984	6 120	13	7
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	632 715	359 901	3	3
Capital expenditures, other than land -----	89 371	54 884	5	5
New machinery and equipment, including automobiles and trucks -----	60 723	33 993	6	6
New automobiles and trucks, intended primarily for highway use -----	29 524	15 763	8	7
Used machinery and equipment, including automobiles and trucks -----	28 648	20 891	9	9
Retirements and disposition of depreciable assets -----	29 286	19 412	17	9
End-of-year gross book value of depreciable assets -----	692 799	395 373	3	3
Depreciation charges during year-----	82 130	47 181	3	3

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	8 631	1
Value of construction work	6 141 153	1
Establishments with inventories:		
Number	3 032	2
Value of construction work	2 704 299	2
Inventories ¹ :		
End of 1992, materials and supplies	67 096	8
End of 1991, materials and supplies	63 492	7
Establishments with no inventories:		
Number	3 035	3
Value of construction work	2 455 398	2
Establishments not reporting:		
Number	2 563	2
Value of construction work	981 456	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	8 631	5 824	1 549	758	388	76	28	8	—	—	
All employees** -----	53 212	10 637	9 798	9 896	11 434	5 101	3 907	2 439	—	—	
Payroll, all employees -----	1 354 875	181 014	201 690	241 616	341 170	156 245	143 710	89 431	—	—	
Dollar value of business done -----	6 280 321	1 230 000	870 990	1 027 830	1 418 019	892 321	553 580	287 581	—	—	
Value of construction work -----	6 141 153	1 206 390	857 250	1 002 887	1 382 477	879 282	526 803	286 065	—	—	
Net value of construction work† -----	4 538 490	929 901	719 896	764 667	1 016 610	509 599	343 654	254 163	—	—	
Value added†† -----	2 720 742	514 479	419 220	469 528	605 899	327 292	222 428	161 896	—	—	
Cost of materials, components, supplies, and fuels -----	1 956 915	439 032	314 416	320 081	446 253	195 346	148 003	93 783	—	—	
Cost of construction work subcontracted out to others -----	1 602 663	276 489	137 354	238 220	365 867	369 683	183 149	31 902	—	—	
Rental cost for machinery, equipment, and buildings -----	125 228	16 644	16 137	20 607	35 423	16 793	14 521	5 103	—	—	
Capital expenditures, other than land -----	101 984	19 154	19 777	20 142	20 945	11 187	6 199	4 579	—	—	
End-of-year gross book value of depreciable assets -----	777 533	154 105	133 172	129 663	176 311	98 148	49 932	36 203	—	—	
1987											
All employees** -----	38 504	(S)	7 522	8 189	7 643	3 579	3 180	(D)	—	—	
Value of construction work -----	3 675 649	(S)	607 397	681 090	886 314	742 410	(D)	(D)	—	—	
Value added†† -----	1 739 743	(S)	292 060	344 879	400 382	202 120	148 449	(D)	—	—	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	4	6	5	3	(Z)	(Z)	(Z)	—	—	
Net value of construction work† -----	1	4	6	5	1	(Z)	(Z)	(Z)	—	—	
Capital expenditures, other than land -----	6	13	22	17	3	(Z)	(Z)	(Z)	—	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	8 631	(S)	(S)	1 163	2 281	1 727	1 038	785	222	107	82
All employees** -----	53 212	(S)	(S)	1 779	5 998	7 400	7 861	10 025	6 241	4 503	8 287
Payroll, all employees -----	1 354 875	(S)	(S)	22 213	88 276	135 247	174 347	268 520	182 985	143 565	329 351
Dollar value of business done -----	6 280 321	(S)	(S)	85 643	376 287	598 127	733 751	1 169 402	767 021	744 552	1 773 285
Value of construction work -----	6 141 153	(S)	(S)	85 232	371 823	588 834	724 460	1 134 136	755 574	722 395	1 726 649
Net value of construction work† -----	4 538 490	(S)	(S)	77 156	332 712	506 707	590 553	894 996	587 935	522 187	996 624
Value added†† -----	2 720 742	(S)	(S)	47 587	198 929	288 345	335 052	563 900	338 129	310 278	619 905
Cost of materials, components, supplies, and fuels -----	1 956 915	(S)	(S)	29 980	138 247	227 655	264 792	366 362	261 253	234 066	423 355
Cost of construction work subcontracted out to others -----	1 602 663	(S)	(S)	(S)	39 111	82 127	133 907	239 140	167 639	200 208	730 025
Rental cost for machinery, equipment, and buildings -----	125 228	(S)	(S)	1 591	6 712	11 845	12 102	19 745	15 433	22 491	34 864
Capital expenditures, other than land -----	101 984	(S)	(S)	2 181	7 093	10 900	10 584	27 572	12 416	12 903	17 914
End-of-year gross book value of depreciable assets -----	777 533	(S)	(S)	15 218	67 678	91 011	84 468	158 110	103 520	100 183	152 106
1987											
All employees** -----	38 504	(S)	(S)	(S)	6 261	5 510	5 096	7 299	3 991	3 961	3 290
Value of construction work -----	3 675 649	(S)	(S)	(S)	330 285	353 008	405 596	755 344	481 423	534 982	710 371
Value added†† -----	1 739 743	(S)	(S)	(S)	184 070	194 941	219 133	370 041	216 075	249 601	244 368
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	8	6	6	6	4	2	2	(Z)
Net value of construction work† -----	1	(S)	(S)	7	5	6	6	5	5	4	(Z)
Capital expenditures, other than land -----	6	(S)	(S)	24	17	18	13	19	9	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

OR—10 OREGON

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	6 141 153	3 678 212	1 606 369	638 033	1	2	2	2
Building construction	4 667 012	2 953 578	1 275 138	438 296	2	2	2	3
Single-family houses	1 688 887	1 167 278	386 132	135 477	4	5	5	6
Single-family houses, detached	1 567 617	1 088 505	357 830	121 282	4	5	6	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	121 270	78 773	28 303	14 194	9	9	16	14
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	216 467	155 392	37 406	23 669	12	16	11	10
Other residential buildings, including hotels, motels, and tourist cabins	54 511	22 272	25 407	6 832	12	13	22	29
Office buildings	439 250	232 870	149 307	57 073	3	3	5	5
Other commercial buildings such as stores, restaurants, and automobile service stations	573 477	329 740	180 181	63 556	4	3	8	6
Industrial buildings and warehouses	893 300	536 835	254 227	102 238	3	3	3	5
Industrial buildings	765 480	453 979	223 554	87 947	3	4	3	5
Warehouses	127 820	82 856	30 673	14 290	6	8	5	8
Religious buildings	61 545	32 233	24 487	4 825	9	5	20	7
Educational buildings	298 982	175 276	106 226	17 481	4	3	9	9
Hospitals and institutional buildings	332 067	225 416	88 377	18 274	2	2	7	8
Amusement, social, and recreational buildings, indoors	38 339	27 932	8 459	1 947	7	9	9	9
Other nonresidential buildings	70 187	48 335	14 929	6 924	10	12	15	10
Nonbuilding construction	1 255 602	724 634	331 231	199 737	2	2	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	410 505	188 020	142 923	79 561	3	5	4	4
Private driveways and parking areas	40 767	27 572	7 904	5 291	12	11	17	24
Bridges, tunnels, and elevated highways	57 289	45 075	9 373	2 841	5	5	5	19
Conservation and development construction	57 432	39 802	11 450	6 180	9	8	10	19
Power and communication transmission lines, towers, and related facilities	168 170	78 167	36 318	53 685	3	5	2	3
Sewers, water mains, and related facilities	185 987	141 622	27 706	16 658	6	6	10	18
Sewers, sewer lines, septic systems, and related facilities	117 700	84 317	21 385	11 998	7	7	12	20
Water mains and related facilities	68 287	57 305	6 322	4 660	10	10	9	34
Sewage treatment and water treatment plants	73 337	20 266	49 255	3 816	6	11	7	14
Other nonbuilding construction	262 117	184 110	46 301	31 706	4	6	2	6
Construction work, n.s.k.	218 539	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)
1987								
Value of construction work	3 675 649	2 186 465	843 102	429 305	1	2	3	3
Building construction	2 619 196	1 669 841	636 502	297 080	2	2	3	4
Single-family houses	776 223	521 137	166 045	89 040	5	7	6	9
Single-family houses, detached	681 373	451 006	153 311	77 055	5	7	6	10
Single-family houses, attached, including townhouses and townhouse-type condominiums	94 850	70 131	12 734	11 985	15	18	15	18
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	152 374	121 677	13 154	17 542	7	7	21	8
Other residential buildings, including hotels, motels, and tourist cabins	52 443	26 880	13 975	11 587	8	12	17	9
Office buildings	388 835	255 040	101 810	31 984	3	4	7	5
Other commercial buildings such as stores, restaurants, and automobile service stations	466 876	288 106	123 505	55 264	4	4	9	6
Industrial buildings and warehouses	364 881	207 193	102 447	55 240	4	5	5	9
Industrial buildings	289 120	156 580	85 261	47 278	4	6	4	10
Warehouses	75 761	50 613	17 186	7 962	7	8	16	18
Religious buildings	19 683	6 570	9 782	3 331	12	14	18	17
Educational buildings	141 319	78 912	45 210	17 196	5	5	9	9
Hospitals and institutional buildings	163 115	120 846	33 643	8 626	2	1	6	6
Amusement, social, and recreational buildings, indoors	33 419	23 468	6 750	3 200	8	8	15	13
Other nonresidential buildings	60 023	33 746	21 073	5 218	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	839 676	502 890	205 708	131 077	3	3	4	6
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	354 728	198 983	111 153	44 590	4	6	6	10
Private driveways and parking areas	13 422	7 997	*3 821	1 602	19	19	40	20
Bridges, tunnels, and elevated highways	60 375	43 997	10 695	5 682	2	3	(Z)	14
Conservation and development construction	11 820	7 345	4 126	349	22	24	36	32
Power and communication transmission lines, towers, and related facilities	65 159	46 005	9 007	10 146	5	6	2	5
Sewers, water mains, and related facilities	113 693	85 897	14 587	13 208	9	10	10	20
Sewers, sewer lines, septic systems, and related facilities	70 755	53 521	9 193	8 039	11	12	12	12
Water mains and related facilities	42 938	32 376	5 394	*5 169	16	16	20	46
Sewage treatment and water treatment plants	37 420	22 462	13 169	1 787	9	11	12	17
Other nonbuilding construction	183 059	90 204	39 150	53 713	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	216 776	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. **Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	8 631	40 854	39 645	40 468	44 207	39 096	1	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	1 868	4 492	4 350	4 666	4 813	4 139	3	5	5	6	5	5
1522	Other residential buildings -----	148	726	794	806	806	499	18	29	26	33	37	16
1531	Operative builders -----	312	459	438	438	511	450	12	15	14	14	14	18
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	109	976	932	858	1 183	929	15	10	12	11	9	11
1542	Nonresidential buildings, n.e.c. ----	406	3 003	2 950	2 992	3 169	2 903	9	5	5	5	5	5
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	244	2 167	2 242	2 019	2 591	1 815	9	4	3	5	4	4
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	7	203	215	199	205	194	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1623	Water, sewer, and utility lines -----	174	2 101	1 862	1 974	2 361	2 208	10	4	4	4	5	4
1629	Heavy construction, n.e.c. -----	239	1 792	1 612	1 767	1 989	1 800	11	5	6	5	5	5
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	802	5 266	5 531	5 171	5 440	4 925	3	3	2	3	3	3
1721	Painting and paper hanging -----	480	1 684	1 536	1 674	1 970	1 555	4	7	7	8	8	7
1731	Electrical work -----	637	4 290	4 016	4 082	4 606	4 454	3	3	3	3	3	3
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	248	994	1 022	1 067	977	910	7	7	7	7	9	9
1742	Plastering, drywall, and insulation work -----	349	2 314	2 235	2 502	2 260	2 260	5	5	6	5	5	7
1743	Terrazzo, tile, marble, and mosaic work -----	85	205	200	209	224	188	15	14	15	13	14	17
175	Carpentry and floor work:												
1751	Carpentry -----	583	1 694	1 742	1 698	1 772	1 563	6	8	9	8	8	9
1752	Floor laying and other floor work --	181	502	473	506	525	504	7	10	11	13	10	11
1761	Roofing, siding, and sheet metal work -----	429	2 158	2 063	1 958	2 439	2 173	6	6	6	7	6	6
1771	Concrete work -----	361	1 699	1 561	1 714	1 833	1 687	6	7	7	7	8	9
1781	Water well drilling -----	59	207	198	192	262	178	9	18	13	19	25	17
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	62	565	573	585	564	538	21	19	21	26	19	14
1793	Glass and glazing work -----	64	238	241	221	253	237	14	12	11	13	11	12
1794	Excavation work -----	261	864	772	904	955	824	10	9	9	9	9	9
1795	Wrecking and demolition work -----	12	96	110	(S)	(S)	95	11	19	21	(S)	(S)	21
1796	Installing building equipment, n.e.c. -----	81	599	628	529	639	601	17	8	8	9	9	8
1799	Special trade contractors, n.e.c. ----	428	1 558	1 347	1 654	1 765	1 467	9	9	8	10	10	11

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	6.2	25.5	150.3	.221	.319	.261	.300	.020
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.4	18.0	164.1	.154	.339	.327	.052	.012
1522	Other residential buildings -----	6.4	25.4	161.4	.205	.249	.454	(S)	.004
1531	Operative builders -----	2.9	24.6	720.1	.066	.344	.366	.001	.001
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	12.6	33.1	441.3	.106	.158	.605	.006	.011
1542	Nonresidential buildings, n.e.c. -----	10.3	30.2	308.8	.136	.192	.594	.024	.015
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	10.9	28.1	158.2	.217	.409	.179	.213	.046
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	36.1	37.6	283.5	.165	(D)	.339	.039	.059
1623	Water, sewer, and utility lines -----	14.6	30.9	133.5	.281	.259	.114	.225	.060
1629	Heavy construction, n.e.c. -----	9.5	30.1	177.0	.214	.299	.199	.190	.041
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.8	29.6	132.5	.299	.405	.115	.607	.015
1721	Painting and paper hanging -----	4.2	17.3	56.3	.370	.309	.028	.655	.024
1731	Electrical work -----	8.9	32.5	121.4	.354	.372	.031	.585	.015
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	4.7	22.0	76.6	.335	.422	.035	.752	.019
1742	Plastering, drywall, and insulation work -----	7.9	23.2	77.4	.359	.329	.070	.805	.015
1743	Terrazzo, tile, marble, and mosaic work -----	3.0	20.3	88.4	.283	.438	*.011	.936	*.031
175	Carpentry and floor work:								
1751	Carpentry -----	3.6	18.7	103.3	.225	.367	.153	.578	.012
1752	Floor laying and other floor work -----	3.7	19.4	111.6	.232	.470	.071	.717	.009
1761	Roofing, siding, and sheet metal work -----	6.5	20.3	106.8	.244	.426	.066	.529	.019
1771	Concrete work -----	5.8	24.0	98.9	.300	(D)	.066	.722	.025
1781	Water well drilling -----	4.4	17.8	88.8	.251	.482	.033	.177	.014
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	10.5	21.4	99.5	.248	.350	*.170	.602	.029
1793	Glass and glazing work -----	6.1	25.6	167.7	.253	.615	(D)	.727	.034
1794	Excavation work -----	4.1	22.1	109.2	.254	.298	.076	.546	.041
1795	Wrecking and demolition work -----	10.1	15.5	81.3	.235	.226	.038	.235	(S)
1796	Installing building equipment, n.e.c. -----	9.5	26.6	84.2	.405	.210	.050	.188	.027
1799	Special trade contractors, n.e.c. -----	4.5	18.7	74.9	.311	.315	(D)	.392	.025

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PORTLAND–SALEM, OR–WA CMSA											
15,16, 17	Construction industries	5 962	40 911	1 098 299	5 072 326	3 696 854	2 180 283	1 588 779	1 375 471	72 454	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 202	4 228	80 141	495 185	330 805	181 716	157 418	164 380	6 444	6	7
1522	Other residential buildings	106	772	20 430	99 581	52 512	32 264	24 304	47 069	1 276	29	15
1531	Operative builders	302	909	26 515	452 156	291 213	132 231	167 971	160 943	1 329	12	17
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	72	755	28 430	360 774	122 402	81 027	45 546	238 372	785	8	5
1542	Nonresidential buildings, n.e.c.	300	3 357	103 541	783 421	318 120	176 018	151 675	465 301	4 275	5	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	99	1 066	36 001	180 857	143 747	72 790	77 102	37 109	3 500	4	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	7	448	17 930	73 531	55 184	29 687	26 005	18 347	1 797	(Z)	(Z)
1623	Water, sewer, and utility lines	121	2 097	66 184	237 465	208 514	144 760	64 152	28 951	10 153	4	4
1629	Heavy construction, n.e.c.	131	1 444	46 428	225 011	176 204	113 922	66 436	48 807	6 677	5	6
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	508	5 402	168 750	561 780	489 903	265 781	231 316	71 878	5 240	3	2
1721	Painting and paper hanging	342	1 548	27 809	74 876	72 518	51 124	21 566	2 357	1 658	8	7
1731	Electrical work	406	4 574	151 742	425 995	412 193	262 221	152 383	13 802	7 041	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	179	983	23 238	67 061	65 281	37 242	28 209	1 780	815	8	6
1742	Plastering, drywall, and insulation work	270	2 682	61 242	163 893	150 830	102 727	51 601	13 063	1 781	8	6
1743	Terrazzo, tile, marble, and mosaic work	69	177	4 046	14 141	13 966	7 840	6 139	*175	412	16	23
175	Carpentry and floor work:											
1751	Carpentry	480	1 949	36 575	147 546	127 346	73 467	56 302	20 200	5 628	8	9
1752	Floor laying and other floor work	151	708	14 668	59 350	55 491	28 659	28 813	3 859	694	12	9
1761	Roofing, siding, and sheet metal work	320	2 306	51 274	191 980	178 343	103 409	78 456	13 637	3 175	6	6
1771	Concrete work	(S)	1 646	38 467	129 961	121 686	76 215	45 851	8 276	2 287	7	6
1781	Water well drilling	19	130	2 248	8 374	8 110	3 655	4 745	264	149	20	8
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	42	535	14 330	45 236	43 364	27 110	16 743	1 873	(S)	6	5
1793	Glass and glazing work	34	291	8 369	32 670	(D)	13 152	20 032	(D)	(D)	8	(D)
1794	Excavation work	153	710	17 232	70 178	64 076	40 323	24 075	6 102	3 173	9	8
1795	Wrecking and demolition work	8	(S)	(S)	(S)	(D)	(S)	1 636	(D)	(D)	(S)	(D)
1796	Installing building equipment, n.e.c.	50	500	15 208	55 605	53 706	43 822	9 966	1 899	456	11	4
1799	Special trade contractors, n.e.c.	(S)	1 600	36 032	109 603	103 500	74 777	30 337	6 102	2 466	9	8
	Portland–Vancouver, OR–WA PMSA											
15,16, 17	Construction industries	4 992	35 531	972 261	4 394 064	3 201 258	1 905 477	1 362 160	1 192 806	64 561	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	994	3 542	68 447	411 105	269 757	150 210	127 294	141 347	5 993	6	8
1522	Other residential buildings	82	646	18 367	84 625	42 774	23 427	21 903	41 851	859	34	18
1531	Operative builders	251	701	21 244	362 956	228 617	110 028	126 464	134 339	897	11	19
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	57	639	24 746	338 157	110 304	74 223	39 974	227 852	617	8	5
1542	Nonresidential buildings, n.e.c.	231	2 720	83 338	631 032	253 917	146 178	117 302	377 115	3 795	5	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	84	984	33 514	165 494	(D)	67 801	69 379	(D)	3 292	5	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1 797	(D)	(D)
1623	Water, sewer, and utility lines	99	1 732	56 935	183 029	162 007	109 670	52 639	21 022	8 374	3	4
1629	Heavy construction, n.e.c.	106	1 189	38 732	191 110	146 022	94 076	55 586	45 088	4 687	6	6

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PORTLAND–SALEM, OR–WA CMSA—Con.											
	Portland–Vancouver, OR–WA PMSA—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	453	4 877	156 878	522 864	453 466	247 298	212 968	69 398	5 095	3	2
1721	Painting and paper hanging	299	1 460	26 684	71 288	68 984	48 860	20 293	2 304	1 635	8	7
1731	Electrical work	348	4 072	137 163	385 880	373 139	237 816	137 016	12 741	6 526	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	166	922	21 154	62 941	61 371	34 865	26 655	1 570	815	8	6
1742	Plastering, drywall, and insulation work	194	2 287	53 869	140 250	128 998	88 823	43 671	11 252	1 422	8	5
1743	Terrazzo, tile, marble, and mosaic work	66	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	412	1 640	31 576	129 837	110 812	62 193	50 983	19 025	5 466	8	9
1752	Floor laying and other floor work	130	656	13 955	56 899	53 151	(D)	28 234	3 748	652	13	9
1761	Roofing, siding, and sheet metal work	263	1 997	46 242	170 575	158 403	92 224	69 700	12 172	(D)	6	6
1771	Concrete work	(S)	1 445	33 858	115 005	108 159	68 322	40 217	6 846	2 048	8	6
1781	Water well drilling	15	101	(D)	5 352	5 112	(D)	(D)	240	149	25	10
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	35	494	13 333	42 431	40 594	25 291	15 792	1 837	(S)	6	5
1793	Glass and glazing work	29	251	7 323	(D)	(D)	11 348	18 057	(D)	(D)	8	(D)
1794	Excavation work	112	602	14 937	60 319	54 679	35 661	19 273	5 640	2 913	8	8
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	46	462	14 154	53 395	(D)	42 206	(D)	(D)	456	12	(D)
1799	Special trade contractors, n.e.c.	(S)	1 523	34 943	(D)	(D)	72 736	28 835	(D)	(D)	9	(D)
	Salem, OR PMSA											
15,16, 17	Construction industries	969	5 380	126 038	678 261	495 596	274 806	226 619	182 665	7 893	5	7
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	208	686	11 695	84 081	61 048	31 506	30 124	23 033	451	17	15
1522	Other residential buildings	*24	*126	*2 063	14 956	9 738	8 837	2 401	5 218	417	44	20
1531	Operative builders	51	208	5 271	*89 200	*62 596	*22 203	*41 508	26 604	*432	35	44
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	116	3 685	22 617	12 098	6 805	5 571	10 519	168	22	20
1542	Nonresidential buildings, n.e.c.	69	636	20 203	152 389	64 203	29 840	34 373	88 186	480	15	14
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	(S)	83	2 487	15 363	(D)	4 989	7 723	(D)	(S)	(Z)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)
1623	Water, sewer, and utility lines	23	365	9 249	54 436	46 507	35 090	11 513	7 929	1 779	15	9
1629	Heavy construction, n.e.c.	(S)	255	7 695	33 901	30 181	19 846	10 850	3 719	1 990	15	23
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	(S)	525	11 872	38 917	36 436	18 483	18 348	2 480	(S)	14	15
1721	Painting and paper hanging	43	87	*1 125	3 587	3 534	2 265	*1 274	(S)	*23	37	36
1731	Electrical work	58	502	14 579	40 115	39 053	24 405	15 367	1 061	515	16	15
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	*61	2 084	4 120	3 910	2 377	1 554	*210	—	42	29
1742	Plastering, drywall, and insulation work	(S)	394	7 373	23 643	21 832	13 904	7 930	*1 810	(S)	24	21
1743	Terrazzo, tile, marble, and mosaic work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	67	310	4 999	17 709	16 533	11 274	5 318	*1 175	162	27	32
1752	Floor laying and other floor work	21	53	713	2 451	2 340	(D)	579	(S)	(S)	35	29
1761	Roofing, siding, and sheet metal work	57	(S)	5 032	21 405	(S)	(S)	8 756	*1 465	(D)	(S)	(S)

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Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16,17 1771 1781 179 1791 1793 1794 1795 1796 1799	PORTLAND–SALEM, OR–WA CMSA—Con.											
	Salem, OR PMSA—Con.											
	Construction industries—Con.											
	Special trade contractors—Con.											
	Concrete work -----	(S)	201	4 609	14 956	13 527	7 892	5 634	1 430	(S)	20	22
	Water well drilling -----	*4	29	(D)	3 022	2 998	(D)	(D)	(S)	—	17	13
	Miscellaneous special trade contractors:											
	Structural steel erection -----	7	41	*996	2 806	2 770	1 818	*951	*36	*8	28	30
	Glass and glazing work -----	*5	*41	*1 046	(D)	(D)	*1 804	*1 975	—	—	44	(D)
	Excavation work -----	41	109	2 295	9 859	9 397	4 662	*4 802	462	260	34	30
	Wrecking and demolition work -----	*3	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
	Installing building equipment, n.e.c. -	4	38	1 054	2 210	(D)	1 616	(D)	(D)	—	(Z)	(D)
	Special trade contractors, n.e.c.-----	(S)	77	1 089	(D)	(D)	*2 041	*1 502	(D)	(D)	39	(D)

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Summary of Findings

This report provides results from the 1992 Census of Construction Industries for Washington. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were 38,974 establishments in this State operating in the construction industries. These establishments accounted for \$16.7 billion in total dollar value of business done.

Most of the 38,974 construction establishments were small. Of the total, 21,695 were nonemployers, and over half of the employer establishments had less than 5 employees. The 5,385 construction establishments with 5 employees or more, while representing only 14 percent of all establishments, accounted for more than 80 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$15.8 billion in total dollar value of business done. Of this amount, \$15.4 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$4.1 billion, leaving net value of construction work of \$11.3 billion. In addition, these establishments paid out \$5.4 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1992 was \$6.7 billion. (See Introduction and appendixes for explanation of terms.)

There were 17,279 establishments with total employment averaging 121,799 during the year. Total payroll for 1992 was \$3.4 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 21,695 establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$967 million. Most of these establishments, about 72 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1 of this report.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

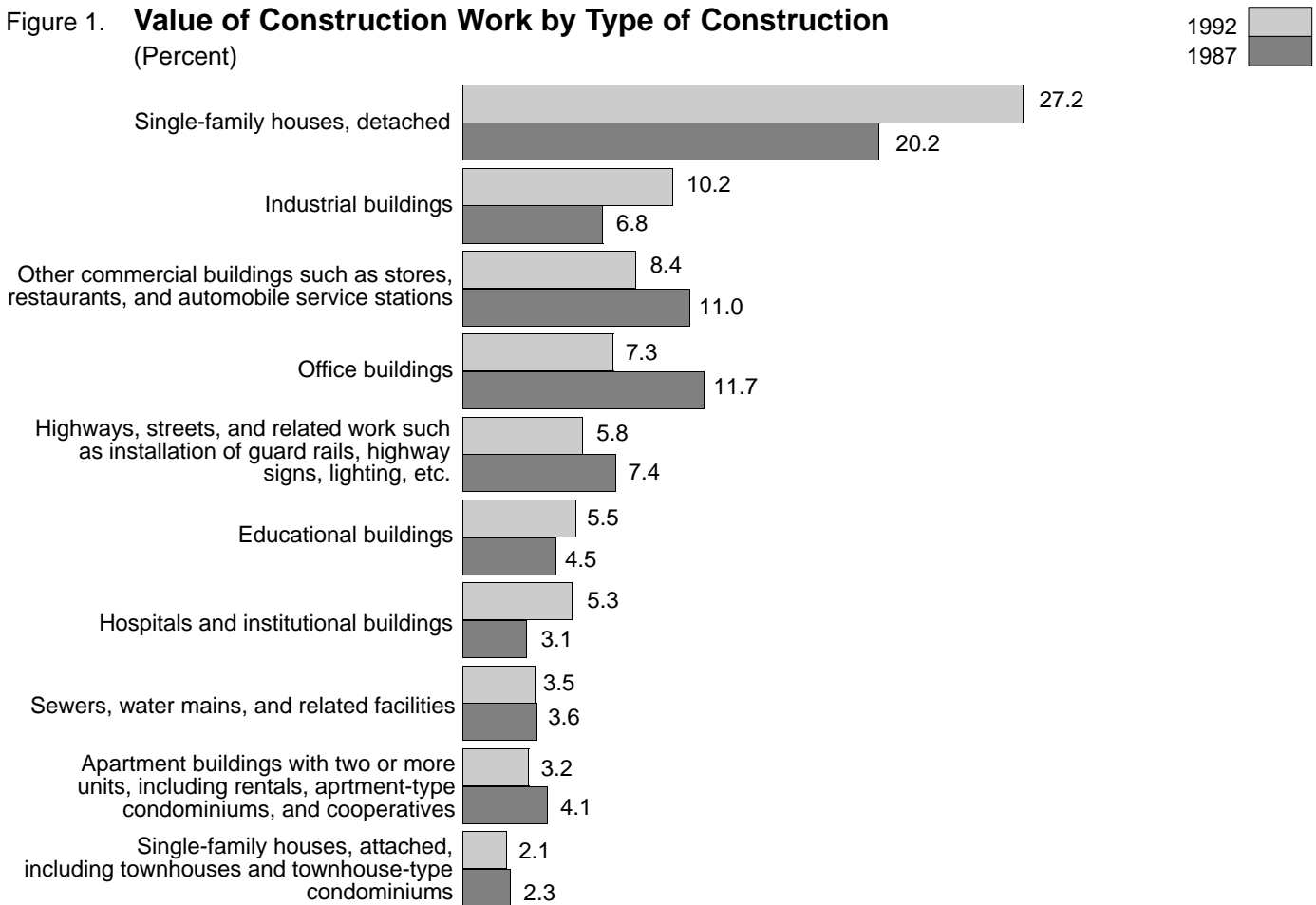


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

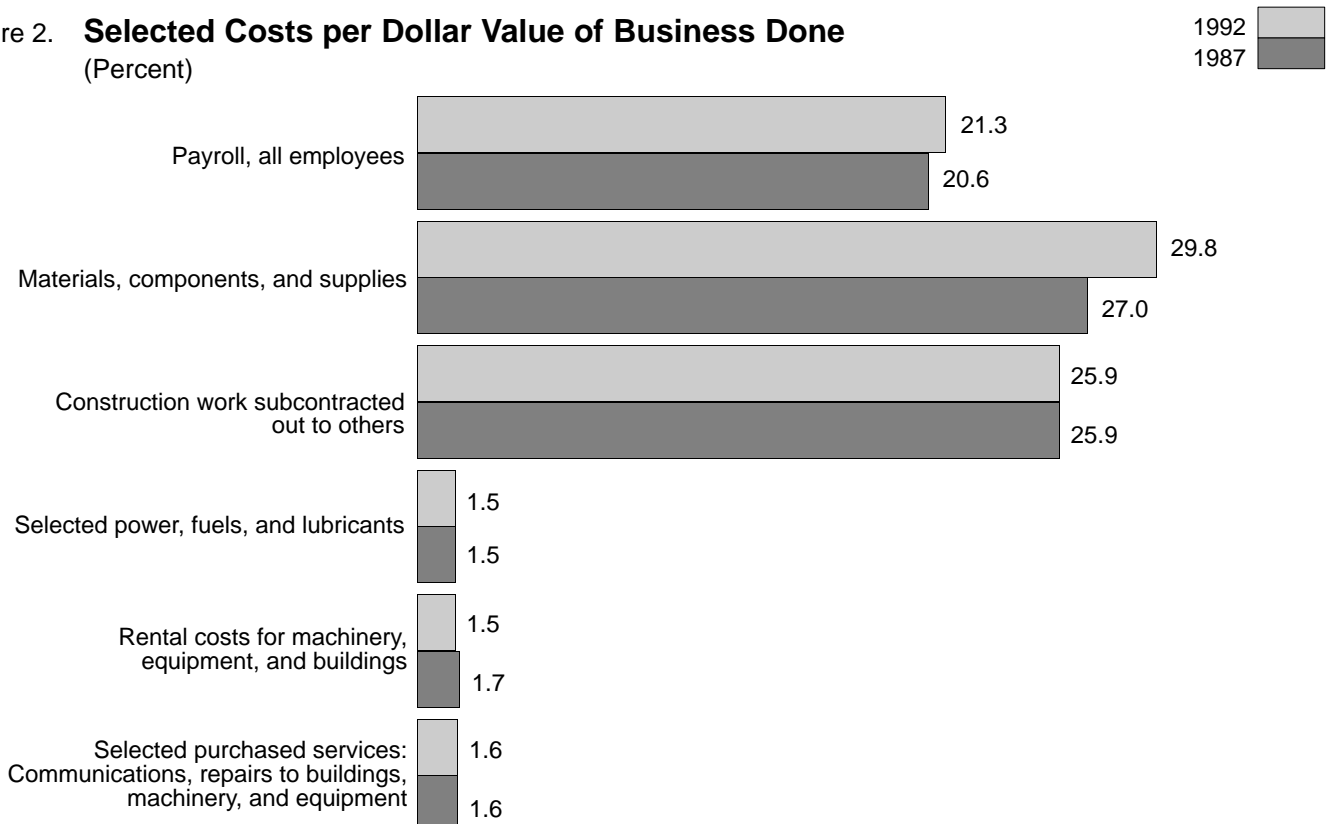


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	38 974	31 302	121 799	16 721 711	21 695	21 634	967 054	17 279	9 668	121 799	15 754 657	1	1
15	Building construction—General contractors and operative builders ----	12 241	9 109	33 355	7 577 817	5 729	5 533	519 514	6 512	3 576	33 355	7 058 303	1	2
16	Heavy construction other than building construction—contractors -----	1 403	773	19 750	2 987 872	360	338	13 522	1 043	435	19 750	2 974 350	1	1
17	Special trade contractors -----	25 330	21 419	68 693	6 156 021	15 606	15 763	434 018	9 724	5 656	68 693	5 722 003	1	1
1711	Plumbing, heating, and air-conditioning --	2 417	1 680	14 223	1 540 016	948	938	40 604	1 469	742	14 223	1 499 412	2	2
1731	Electrical work -----	1 973	1 158	12 887	1 145 499	768	754	22 510	1 205	404	12 887	1 122 989	2	1
	1987													
15, 16, 17	Construction industries² -----	35 091	26 496	85 585	10 740 896	22 673	22 778	1 265 783	12 418	3 718	85 585	9 475 113	1	1
15	Building construction—General contractors and operative builders ----	10 785	7 250	25 307	4 661 988	6 372	6 056	525 337	4 413	1 194	25 307	4 136 651	2	2
16	Heavy construction other than building construction—contractors -----	1 315	572	13 553	1 828 510	385	380	26 339	930	192	13 553	1 802 171	3	2
17	Special trade contractors -----	21 845	17 476	46 038	3 930 599	14 955	15 179	499 173	6 890	2 297	46 038	3 431 426	1	1
1711	Plumbing, heating, and air-conditioning --	2 081	1 308	8 404	830 700	984	968	48 749	1 097	340	8 404	781 951	2	2
1731	Electrical work -----	1 786	1 076	8 564	696 962	874	868	43 923	912	208	8 564	653 039	2	2

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

²Includes data for "Land Subdividers and Developers," SIC 6552.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries¹	17 279	121 799	94 066	3 351 695	2 396 511	15 370 231	11 285 723	6 745 006
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses	4 362	13 005	9 816	240 525	168 272	1 454 831	1 020 871	565 161
1522	Other residential buildings	220	1 236	937	27 785	20 359	200 587	126 482	59 653
1531	Operative builders	866	4 527	2 586	136 095	56 837	1 673 294	991 715	632 544
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses	203	4 369	3 394	157 878	106 849	1 164 809	605 657	320 154
1542	Nonresidential buildings, n.e.c.	861	10 219	7 413	321 009	208 214	2 434 798	993 731	485 576
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction	259	5 756	4 629	198 551	147 174	861 134	703 861	457 095
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction	23	1 414	1 023	62 914	45 547	235 643	190 397	126 915
1623	Water, sewer, and utility lines	275	4 516	3 644	156 683	113 067	578 885	486 728	334 498
1629	Heavy construction, n.e.c.	486	8 064	6 259	263 268	188 127	1 167 465	954 593	522 935
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning	1 469	14 223	10 481	444 098	313 719	1 453 211	1 290 825	793 115
1721	Painting and paper hanging	1 000	4 482	3 825	88 817	68 640	233 275	225 634	160 423
1731	Electrical work	1 205	12 887	10 183	395 855	306 917	1 111 703	1 066 891	615 052
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework	408	2 107	1 791	46 082	37 621	146 606	142 078	86 658
1742	Plastering, drywall, and insulation work	739	7 510	6 367	176 392	141 915	480 554	456 094	294 988
1743	Terrazzo, tile, marble, and mosaic work	162	762	590	18 193	12 907	56 313	54 354	29 205
175	Carpentry and floor work:								
1751	Carpentry	1 265	4 663	3 748	93 111	71 417	328 722	298 779	197 095
1752	Floor laying and other floor work	376	1 681	1 280	34 198	23 042	150 081	136 301	71 846
1761	Roofing, siding, and sheet metal work	839	5 911	4 631	128 948	93 346	472 215	450 868	255 655
1771	Concrete work	826	3 793	3 138	82 764	63 986	265 293	247 618	154 718
1781	Water well drilling	100	559	405	11 946	8 626	46 185	44 224	26 025
179	Miscellaneous special trade contractors:								
1791	Structural steel erection	49	1 126	893	41 753	32 702	119 793	107 745	73 650
1793	Glass and glazing work	120	891	620	23 117	14 384	82 112	81 805	41 862
1794	Excavation work	469	2 484	2 056	60 081	47 887	221 690	208 104	152 841
1795	Wrecking and demolition work, n.e.c.	22	234	186	7 409	5 291	22 909	21 153	20 165
1796	Installing building equipment, n.e.c.	67	1 289	997	36 318	27 107	119 897	113 287	86 139
1799	Special trade contractors, n.e.c.	609	4 091	3 175	97 907	72 557	288 226	265 927	181 037

¹For 1987, includes data for "Land Subdividers and Developers," SIC 6552. For 1992, SIC 6552 data are included in the Census of Financial, Insurance, and Real Estate Industries.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
4 925 143	4 084 508	4 261 704	241 731	232 457	1 831 649	85 585	9 149 222	4 197 508	1	1	3	15, 16, 17
												15
487 583	433 960	59 129	18 249	12 716	106 560	8 318	753 601	285 585	3	3	11	152
68 868	74 105	8 685	1 513	1 728	24 639	1 586	258 313	79 291	10	13	33	1521
425 485	681 579	24 027	4 188	7 848	63 366	2 476	600 398	159 547	5	7	13	1531
296 769	559 152	80 067	8 449	4 610	32 410	1 878	329 949	97 038	3	2	7	154
526 648	1 441 066	84 029	22 812	14 692	115 180	11 049	2 041 106	606 002	3	2	9	1541
												1542
												16
314 290	157 273	194 780	17 562	37 504	313 786	4 599	603 218	339 452	3	2	3	1611
67 549	45 245	13 515	6 763	4 344	52 021	827	126 006	49 229	1	1	(Z)	162
166 447	92 157	122 414	20 135	29 007	209 982	3 143	355 794	196 174	2	2	8	1622
477 074	212 872	205 910	36 548	24 184	227 856	4 984	672 952	367 384	3	2	10	1623
												1629
												17
543 911	162 386	864 597	28 889	18 013	142 390	8 404	756 797	417 152	2	2	7	1711
65 962	7 641	126 608	5 437	6 204	41 052	3 023	156 752	115 693	6	4	34	1721
463 125	44 812	720 470	17 067	14 156	100 299	8 564	638 499	374 240	2	1	9	1731
55 937	4 528	116 796	2 248	4 145	24 456	1 300	95 384	53 232	7	6	27	174
163 771	24 460	391 070	6 528	4 728	32 510	5 785	337 577	206 674	4	3	14	1741
26 793	1 959	38 528	541	520	4 590	388	37 573	18 875	11	11	26	1742
												1743
109 345	29 942	(S)	(S)	3 427	24 411	2 501	143 591	85 452	5	5	20	175
68 244	13 781	120 794	1 475	801	9 547	1 045	74 921	37 435	6	5	16	1751
200 533	21 347	218 323	6 268	5 776	65 079	4 480	323 387	179 254	4	3	17	1752
96 834	17 676	179 057	6 545	7 527	50 219	3 348	224 176	142 499	5	4	17	1761
19 582	1 961	3 731	692	4 542	21 553	365	36 127	22 904	12	12	28	1771
												1781
(D)	12 048	80 105	4 117	1 457	9 068	975	81 263	50 030	7	6	5	179
44 538	308	50 829	2 112	556	7 788	1 022	75 468	38 252	5	5	25	1791
71 797	13 586	159 470	10 020	15 613	100 361	1 519	137 725	95 382	6	5	16	1793
(D)	1 756	14 399	1 204	902	11 300	262	19 033	16 030	6	10	(Z)	1794
27 246	6 611	49 056	2 068	1 176	7 743	716	66 422	41 416	3	2	39	1795
90 428	22 299	123 950	6 130	6 280	33 482	2 341	135 274	88 358	4	4	22	1796
												1799

Table 3. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	17 279	12 418	10 487	11 379	(Z)	1	2	2
Proprietors and working partners	9 668	3 718	3 831	7 188	1	4	4	4
All employees**	121 799	85 585	77 690	84 829	1	1	1	1
Construction workers:								
March	88 515	60 998	58 533	61 633	1	1	1	1
May	95 459	65 747	60 912	72 712	1	1	1	1
August	100 893	72 856	63 606	79 011	1	1	1	1
November	91 398	67 229	56 809	74 313	1	1	1	1
Average	94 066	66 707	61 087	71 978	1	1	1	1
Other employees:								
March	27 976	18 309	16 450	12 522	1	1	1	1
May	27 339	18 581	(NA)	(NA)	1	1	(NA)	(NA)
August	28 121	19 136	(NA)	(NA)	1	1	(NA)	(NA)
November	27 494	19 484	(NA)	(NA)	1	2	(NA)	(NA)
Average	27 733	18 877	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	3 351 695	1 948 713	1 703 642	1 214 643	(Z)	1	1	1
Payroll, construction workers	2 396 511	1 407 909	1 315 192	993 098	(Z)	1	1	1
Payroll, other employees	955 184	540 803	388 449	221 545	1	1	1	1
First-quarter payroll, all employees	733 723	428 157	416 192	256 043	1	1	1	1
Fringe benefits, all employees	894 986	467 915	317 295	261 295	1	1	1	1
Legally required expenditures	577 214	323 399	249 769	151 825	1	1	1	1
Voluntary expenditures	317 772	144 515	67 525	109 470	1	1	1	(Z)
Dollar value of business done	15 754 657	9 475 113	7 010 041	5 200 680	1	1	1	1
Value of construction work	15 370 231	9 149 222	6 834 101	4 961 221	1	1	1	1
Value of construction work subcontracted in from others	4 261 704	2 227 684	1 452 953	1 234 436	2	2	1	1
Other business receipts	384 426	201 964	124 690	239 458	4	4	2	2
Net value of construction†	11 285 723	6 693 759	5 239 452	3 884 778	1	1	1	1
Value added††	6 745 006	4 197 508	3 396 250	2 304 719	1	1	1	1
Selected costs	9 009 651	5 153 677	3 562 541	2 803 760	1	1	1	1
Materials, components, and supplies	4 696 166	2 555 229	1 854 343	1 643 648	1	1	1	1
Construction work subcontracted out to others	4 084 508	2 455 463	1 594 648	1 076 443	1	2	1	1
Selected power, fuels, and lubricants	228 977	142 985	113 548	83 669	2	1	1	1
Electricity	38 014	19 230	17 088	8 485	2	2	2	2
Natural gas	10 043	4 136	3 371	4 254	3	4	2	3
Gasoline and diesel fuel	166 440	110 533	85 739	58 546	2	2	2	1
On highway use	122 035	78 827	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use	44 406	31 705	(NA)	(NA)	3	2	(NA)	(NA)
Other, including lubricating oils and greases	14 480	9 085	7 349	12 388	3	3	2	2
Rental cost for machinery, equipment, and buildings	241 731	163 724	100 001	75 814	2	2	1	1
For machinery and equipment	165 320	116 310	74 302	64 458	2	2	1	1
For buildings	76 410	47 414	25 699	11 356	3	3	2	2
Selected purchased services	252 640	148 712	110 243	95 712	3	2	1	1
Communication services	83 450	40 749	26 570	19 058	4	2	2	3
Repairs to buildings and other structures	9 725	6 556	4 609	4 311	6	5	4	4
Repairs to machinery and equipment	159 465	101 406	79 063	72 343	2	2	1	1
Ownership of construction projects:								
Value of construction work	15 370 231	9 149 222	6 834 101	4 961 221	1	1	1	1
Government owned	3 825 885	2 413 716	2 031 561	1 375 026	2	2	1	1
Federal	815 943	706 906	(NA)	(NA)	3	3	(NA)	(NA)
State and local	3 009 942	1 706 810	(NA)	(NA)	2	3	(NA)	(NA)
Privately owned	11 544 346	6 735 505	4 802 539	3 586 196	1	1	1	1

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 4. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 691 941	1 063 253	2	3
Capital expenditures, other than land -----	232 457	132 103	3	3
New -----	161 331	85 551	3	3
Used -----	71 126	46 551	4	5
Retirements and disposition of depreciable assets -----	92 750	48 892	4	6
End-of-year gross book value of depreciable assets -----	1 831 649	1 146 463	2	3
Depreciation charges during year -----	216 860	136 471	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	235 289	194 926	9	10
Capital expenditures, other than land -----	17 444	14 082	9	9
New buildings and other structures -----	13 873	9 044	11	8
Used buildings and other structures -----	3 571	5 038	11	19
Retirements and disposition of depreciable assets -----	(S)	8 087	(S)	28
End-of-year gross book value of depreciable assets -----	234 561	200 921	9	9
Depreciation charges during year -----	19 193	13 976	9	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 456 653	868 327	1	3
Capital expenditures, other than land -----	215 013	118 020	3	3
New machinery and equipment, including automobiles and trucks -----	147 458	76 506	3	4
New automobiles and trucks, intended primarily for highway use -----	52 124	40 520	4	5
Used machinery and equipment, including automobiles and trucks -----	67 555	41 513	4	5
Retirements and disposition of depreciable assets -----	74 578	40 805	5	4
End-of-year gross book value of depreciable assets -----	1 597 088	945 542	1	3
Depreciation charges during year -----	197 666	122 495	2	2

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 5. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	17 279	(Z)
Value of construction work	15 370 231	1
Establishments with inventories:		
Number	5 259	2
Value of construction work	6 352 137	1
Inventories ¹ :		
End of 1992, materials and supplies	227 715	13
End of 1991, materials and supplies	184 034	9
Establishments with no inventories:		
Number	6 492	2
Value of construction work	6 093 658	1
Establishments not reporting:		
Number	5 528	2
Value of construction work	2 924 436	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 6. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	17 279	11 895	2 693	1 511	867	205	80	22	5	2	
All employees** -----	121 799	20 864	17 166	19 927	25 489	13 896	11 762	7 011	5 685	(D)	
Payroll, all employees -----	3 351 695	359 289	372 661	512 583	727 482	453 177	437 980	267 098	221 424	(D)	
Dollar value of business done -----	15 754 657	2 380 733	1 794 490	2 106 133	3 064 196	2 033 352	2 030 181	1 205 109	1 140 464	(D)	
Value of construction work -----	15 370 231	2 336 332	1 754 203	2 051 694	2 994 101	1 977 386	1 966 426	1 183 876	1 106 213	(D)	
Net value of construction work† -----	11 285 723	1 831 966	1 362 351	1 641 360	2 215 624	1 368 816	1 256 740	756 323	852 544	(D)	
Value added†† -----	6 745 006	1 067 670	829 921	1 002 009	1 319 753	903 298	780 608	429 979	411 768	(D)	
Cost of materials, components, supplies, and fuels -----	4 925 143	808 697	572 716	693 790	965 965	521 484	539 887	347 577	475 027	(D)	
Cost of construction work subcontracted out to others -----	4 084 508	504 366	391 852	410 334	778 478	608 570	709 686	427 553	253 669	(D)	
Rental cost for machinery, equipment, and buildings -----	241 731	(S)	29 632	32 292	50 033	33 319	37 214	17 036	15 020	(D)	
Capital expenditures, other than land -----	232 457	38 782	31 154	31 159	46 296	30 508	31 627	14 303	8 628	(D)	
End-of-year gross book value of depreciable assets -----	1 831 649	266 248	222 800	284 297	352 096	207 355	313 871	91 386	93 595	(D)	
1987											
All employees** -----	85 585	(S)	14 829	15 808	17 615	9 362	7 395	5 378	(D)	—	
Value of construction work -----	9 149 222	(S)	1 147 967	1 483 960	1 983 987	1 227 921	1 858 925	(D)	(D)	—	
Value added†† -----	4 197 508	(S)	544 632	722 196	940 684	997 491	(D)	339 105	(D)	—	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	3	4	4	2	1	(Z)	(Z)	(Z)	(D)	
Net value of construction work† -----	1	4	5	3	1	2	(Z)	(Z)	(Z)	(D)	
Capital expenditures, other than land -----	3	9	12	8	4	1	(Z)	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 7. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics		Establishments with dollar value of business done—									
		Total	Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	$10,000,000 or more
1992											
Number of establishments -----	17 279	(S)	(S)	2 662	4 506	3 078	1 989	1 513	533	262	220
All employees** -----	121 799	(S)	(S)	3 702	11 009	13 702	15 291	21 682	13 361	11 820	29 180
Payroll, all employees -----	3 351 695	(S)	(S)	42 910	161 066	261 861	334 102	574 965	405 697	401 091	1 151 159
Dollar value of business done -----	15 754 657	(S)	(S)	193 549	731 162	1 069 471	1 366 689	2 259 714	1 855 896	1 796 208	6 413 513
Value of construction work -----	15 370 231	(S)	(S)	191 108	723 275	1 045 832	1 336 812	2 190 528	1 803 284	1 766 777	6 244 557
Net value of construction work† -----	11 285 723	(S)	(S)	173 260	644 365	915 338	1 111 232	1 776 306	1 368 258	1 345 084	3 889 617
Value added†† -----	6 745 006	(S)	(S)	110 271	399 274	547 369	681 871	1 056 029	839 232	838 589	2 233 335
Cost of materials, components, supplies, and fuels -----	4 925 143	(S)	(S)	65 430	252 978	391 608	459 238	789 463	581 639	535 926	1 825 238
Cost of construction work subcontracted out to others -----	4 084 508	(S)	(S)	(S)	(S)	130 494	225 580	414 222	435 026	421 693	2 354 940
Rental cost for machinery, equipment, and buildings -----	241 731	(S)	(S)	(S)	11 812	18 814	22 642	39 751	28 511	32 263	84 819
Capital expenditures, other than land -----	232 457	(S)	(S)	3 523	19 664	20 800	25 069	34 212	28 057	24 466	75 289
End-of-year gross book value of depreciable assets -----	1 831 649	(S)	(S)	25 754	117 578	137 344	205 792	295 416	194 093	206 995	639 012
1987											
All employees** -----	85 585	(S)	(S)	(S)	(S)	11 835	11 841	13 994	11 142	7 074	15 320
Value of construction work -----	9 149 222	(S)	(S)	(S)	(S)	777 170	944 189	1 443 346	1 302 196	989 523	2 965 364
Value added†† -----	4 197 508	(S)	(S)	(S)	(S)	400 762	462 509	702 021	629 192	431 253	1 169 517
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	6	4	5	4	3	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	5	4	4	4	3	4	3	1
Capital expenditures, other than land -----	3	(S)	(S)	19	12	13	15	8	3	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies. Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 8. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	15 370 231	10 203 695	3 300 279	1 295 117	1	1	1	1
Building construction	11 411 866	7 994 234	2 553 582	864 049	1	1	1	2
Single-family houses	4 494 850	3 456 398	756 732	281 719	2	3	3	4
Single-family houses, detached	4 179 297	3 234 884	696 773	247 640	3	3	3	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	315 553	221 515	59 959	34 079	6	8	9	15
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	491 570	362 205	80 765	48 599	7	9	5	6
Other residential buildings, including hotels, motels, and tourist cabins	145 929	101 799	34 178	9 951	6	8	8	11
Office buildings	1 119 708	611 623	392 940	115 145	2	3	2	4
Other commercial buildings such as stores, restaurants, and automobile service stations	1 294 123	864 617	311 988	117 518	2	3	4	4
Industrial buildings and warehouses	1 834 086	1 319 324	336 094	178 668	1	1	3	3
Industrial buildings	1 566 689	1 137 342	274 625	154 722	1	1	3	3
Warehouses	267 397	181 982	61 469	23 945	3	4	5	5
Religious buildings	92 299	51 047	30 649	10 603	11	11	18	8
Educational buildings	850 367	554 012	254 809	41 546	3	3	5	4
Hospitals and institutional buildings	812 235	506 050	272 019	34 166	1	1	3	3
Amusement, social, and recreational buildings, indoors	89 281	48 574	37 784	2 923	7	10	12	13
Other nonresidential buildings	187 420	118 586	45 623	23 212	6	8	11	7
Nonbuilding construction	3 387 225	2 209 460	746 697	431 067	1	1	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	898 068	425 506	312 169	160 393	2	2	4	3
Airport runways and related work	89 952	69 868	17 412	2 672	1	1	3	(Z)
Recreational facilities	81 470	66 562	10 312	(S)	22	26	25	(S)
Bridges, tunnels, and elevated highways	211 805	135 479	61 275	15 052	2	1	1	20
Conservation and development construction	132 962	107 474	*8 085	17 403	8	6	41	12
Power and communication transmission lines, towers, and related facilities	220 109	116 248	68 290	35 572	3	5	3	3
Sewers, water mains, and related facilities	539 958	428 365	63 835	47 758	3	3	4	9
Sewers, sewer lines, septic systems, and related facilities	331 464	265 269	40 695	25 501	3	4	3	12
Water mains and related facilities	208 494	163 096	23 140	22 257	5	5	8	12
Pipeline construction other than sewer or water lines	95 775	70 144	10 135	15 496	4	4	13	4
Blast furnaces, petroleum refineries, chemical complexes, etc.	296 479	150 529	83 354	62 596	(Z)	(Z)	(Z)	1
Sewage treatment and water treatment plants	173 418	122 810	44 445	6 163	2	2	3	1
Other nonbuilding construction	647 228	516 476	67 387	63 365	3	3	5	8
Construction work, n.s.k.	571 140	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1987								
Value of construction work	9 149 222	6 067 172	1 890 244	770 161	1	1	2	2
Building construction	6 594 889	4 559 727	1 458 387	538 618	1	1	3	3
Single-family houses	2 054 955	1 536 299	364 115	154 540	3	3	4	6
Single-family houses, detached	1 843 661	1 377 134	329 254	137 271	3	4	5	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	211 294	159 165	34 861	17 269	9	11	16	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	373 861	291 996	36 313	45 551	4	5	10	5
Other residential buildings, including hotels, motels, and tourist cabins	226 368	147 304	59 455	19 608	4	5	10	9
Office buildings	1 067 848	764 046	233 323	70 478	2	1	4	5
Other commercial buildings such as stores, restaurants, and automobile service stations	1 003 229	692 249	232 227	78 752	3	3	6	5
Industrial buildings and warehouses	898 447	593 300	207 217	97 929	3	3	9	3
Industrial buildings	619 414	361 492	176 033	81 888	4	4	11	3
Warehouses	279 033	231 808	31 184	16 041	3	3	5	7
Religious buildings	66 770	37 275	21 843	7 651	9	15	10	8
Educational buildings	408 271	231 258	152 486	24 526	5	5	8	12
Hospitals and institutional buildings	285 685	171 334	96 055	18 295	3	3	4	10
Amusement, social, and recreational buildings, indoors	55 027	36 567	13 831	4 628	5	5	15	5
Other nonresidential buildings	154 422	91 898	42 033	20 491	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	2 132 689	1 473 642	431 339	227 706	2	2	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	673 076	413 302	200 253	59 519	2	2	3	6
Recreational facilities	*57 656	*46 265	*6 147	*5 243	42	44	60	56
Bridges, tunnels, and elevated highways	181 987	148 317	26 098	7 571	8	10	8	14
Conservation and development construction	12 244	10 003	1 444	*796	23	25	6	56
Power and communication transmission lines, towers, and related facilities	110 226	78 344	23 230	8 651	3	3	3	11
Sewers, water mains, and related facilities	328 005	261 225	49 468	17 311	4	4	6	11
Sewers, sewer lines, septic systems, and related facilities	197 450	158 345	28 789	10 316	3	4	4	14
Water mains and related facilities	130 555	102 880	20 679	6 995	6	5	12	13
Pipeline construction other than sewer or water lines	28 529	19 807	5 869	2 852	14	16	14	16
Blast furnaces, petroleum refineries, chemical complexes, etc.	103 938	16 724	44 329	42 885	1	3	1	1
Sewage treatment and water treatment plants	98 888	79 108	15 877	3 902	3	4	3	7
Other nonbuilding construction	538 139	400 546	58 623	78 975	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	421 644	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Statistics for "Land Subdividers and Developers," SIC 6552, are included in the statistics from previous censuses, but excluded for 1992. SIC 6552 is covered in the Census of Financial, Insurance, and Real Estate Industries.

Table 9. **Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries -----	17 279	94 066	88 515	95 459	100 893	91 398	(Z)	1	1	1	1	1
15	Building construction—General contractors and operative builders:												
152	General contractors, residential buildings:												
1521	Single-family houses -----	4 362	9 816	9 595	9 875	10 620	9 175	2	3	4	3	3	4
1522	Other residential buildings -----	220	937	884	1 145	829	888	14	10	11	10	10	14
1531	Operative builders -----	866	2 586	2 593	2 718	2 665	2 368	7	6	6	6	6	6
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses -----	203	3 394	3 078	3 575	3 510	3 413	13	3	2	3	4	3
1542	Nonresidential buildings, n.e.c. ----	861	7 413	6 709	7 744	8 108	7 091	6	3	4	5	3	4
16	Heavy construction other than building construction—contractors:												
1611	Highway and street construction -----	259	4 629	3 503	4 739	5 584	4 692	10	2	3	2	3	3
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction -----	23	1 023	672	1 026	1 307	1 086	15	1	(Z)	(Z)	2	2
1623	Water, sewer, and utility lines -----	275	3 644	3 191	3 571	3 791	4 022	10	2	2	3	2	2
1629	Heavy construction, n.e.c. -----	486	6 259	5 935	6 217	6 606	6 276	8	3	3	2	3	3
17	Special trade contractors:												
1711	Plumbing, heating, and air-conditioning -----	1 469	10 481	10 619	10 474	10 673	10 157	3	2	2	2	2	3
1721	Painting and paper hanging -----	1 000	3 825	3 208	3 945	4 675	3 474	3	6	5	7	8	6
1731	Electrical work -----	1 205	10 183	9 701	10 044	10 642	10 344	2	2	2	2	2	2
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework -----	408	1 791	1 635	1 837	1 923	1 771	6	7	6	7	8	8
1742	Plastering, drywall, and insulation work -----	739	6 367	6 232	6 526	6 649	6 060	4	4	4	4	4	6
1743	Terrazzo, tile, marble, and mosaic work -----	162	590	574	702	591	492	13	12	11	16	10	9
175	Carpentry and floor work:												
1751	Carpentry -----	1 265	3 748	3 926	3 866	3 798	3 402	4	5	5	5	5	6
1752	Floor laying and other floor work --	376	1 280	1 251	1 328	1 354	1 186	5	6	6	6	6	7
1761	Roofing, siding, and sheet metal work -----	839	4 631	4 332	4 631	5 110	4 449	3	3	4	4	4	3
1771	Concrete work -----	826	3 138	2 977	3 205	3 388	2 984	4	5	5	5	5	6
1781	Water well drilling -----	100	405	407	405	447	360	13	11	11	9	10	11
179	Miscellaneous special trade contractors:												
1791	Structural steel erection -----	49	893	831	857	1 020	862	18	7	5	10	8	9
1793	Glass and glazing work -----	120	620	583	592	675	629	8	6	6	5	6	7
1794	Excavation work -----	469	2 056	1 860	2 020	2 269	2 075	8	6	6	6	6	7
1795	Wrecking and demolition work -----	22	186	172	159	233	180	34	8	9	9	6	4
1796	Installing building equipment, n.e.c. -----	67	997	1 232	883	930	944	16	3	3	4	3	2
1799	Special trade contractors, n.e.c. ----	609	3 175	2 816	3 375	3 492	3 018	7	4	4	4	4	4

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Selected Industry Ratios for Establishments With Payroll in This State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	7.0	27.5	163.4	.218	.320	.266	.277	.016
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.0	18.5	148.2	.165	.335	.298	.041	.013
1522	Other residential buildings -----	5.6	22.5	214.1	.139	.343	.369	.043	.008
1531	Operative builders -----	5.2	30.1	647.1	.081	.254	.407	.014	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	21.5	36.1	343.2	.136	.255	.480	.069	.007
1542	Nonresidential buildings, n.e.c. -----	11.9	31.4	328.5	.132	.216	.592	.035	.009
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	22.2	34.5	186.0	.231	.365	.183	.226	.020
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	61.3	44.5	230.3	.267	.287	.192	.057	.029
1623	Water, sewer, and utility lines -----	16.4	34.7	158.9	.271	.288	.159	.211	.035
1629	Heavy construction, n.e.c. -----	16.6	32.6	186.5	.226	.409	.182	.176	.031
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	9.7	31.2	138.7	.306	.374	.112	.595	.020
1721	Painting and paper hanging -----	4.5	19.8	61.0	.381	.283	.033	.543	.023
1731	Electrical work -----	10.7	30.7	109.2	.356	.417	.040	.648	.015
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.2	21.9	81.9	.314	.382	.031	.797	.015
1742	Plastering, drywall, and insulation work -----	10.2	23.5	75.5	.367	.341	.051	.814	.014
1743	Terrazzo, tile, marble, and mosaic work -----	4.7	23.9	95.4	.323	.476	.035	.684	.010
175	Carpentry and floor work:								
1751	Carpentry -----	3.7	20.0	87.7	.283	.333	.091	(S)	(S)
1752	Floor laying and other floor work -----	4.5	20.3	117.3	.228	.455	.092	.805	.010
1761	Roofing, siding, and sheet metal work -----	7.0	21.8	102.0	.273	.425	.045	.462	.013
1771	Concrete work -----	4.6	21.8	84.5	.312	.365	.067	.675	.025
1781	Water well drilling -----	5.6	21.4	114.0	.259	.424	.042	.081	.015
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	22.8	37.1	134.1	.349	(D)	.101	.669	.034
1793	Glass and glazing work -----	7.4	25.9	132.4	.282	.542	.004	.619	.026
1794	Excavation work -----	5.3	24.2	107.8	.271	.324	.061	.719	.045
1795	Wrecking and demolition work -----	10.6	31.7	123.2	.323	(D)	.077	.629	.053
1796	Installing building equipment, n.e.c. -----	19.1	28.2	120.3	.303	.227	.055	.409	.017
1799	Special trade contractors, n.e.c. -----	6.7	23.9	90.8	.340	.314	.077	.430	.021

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	PORTLAND–SALEM, OR–WA											
	CMSA											
15,16,17	Construction industries	5 962	40 911	1 098 299	5 072 326	3 696 854	2 180 283	1 588 779	1 375 471	72 454	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 202	4 228	80 141	495 185	330 805	181 716	157 418	164 380	6 444	6	7
1522	Other residential buildings	106	772	20 430	99 581	52 512	32 264	24 304	47 069	1 276	29	15
1531	Operative builders	302	909	26 515	452 156	291 213	132 231	167 971	160 943	1 329	12	17
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	72	755	28 430	360 774	122 402	81 027	45 546	238 372	785	8	5
1542	Nonresidential buildings, n.e.c.	300	3 357	103 541	783 421	318 120	176 018	151 675	465 301	4 275	5	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	99	1 066	36 001	180 857	143 747	72 790	77 102	37 109	3 500	4	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	7	448	17 930	73 531	55 184	29 687	26 005	18 347	1 797	(Z)	(Z)
1623	Water, sewer, and utility lines	121	2 097	66 184	237 465	208 514	144 760	64 152	28 951	10 153	4	4
1629	Heavy construction, n.e.c.	131	1 444	46 428	225 011	176 204	113 922	66 436	48 807	6 677	5	6
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	508	5 402	168 750	561 780	489 903	265 781	231 316	71 878	5 240	3	2
1721	Painting and paper hanging	342	1 548	27 809	74 876	72 518	51 124	21 566	2 357	1 658	8	7
1731	Electrical work	406	4 574	151 742	425 995	412 193	262 221	152 383	13 802	7 041	3	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	179	983	23 238	67 061	65 281	37 242	28 209	1 780	815	8	6
1742	Plastering, drywall, and insulation work	270	2 682	61 242	163 893	150 830	102 727	51 601	13 063	1 781	8	6
1743	Terrazzo, tile, marble, and mosaic work	69	177	4 046	14 141	13 966	7 840	6 139	*175	412	16	23
175	Carpentry and floor work:											
1751	Carpentry	480	1 949	36 575	147 546	127 346	73 467	56 302	20 200	5 628	8	9
1752	Floor laying and other floor work	151	708	14 668	59 350	55 491	28 659	28 813	3 859	694	12	9
1761	Roofing, siding, and sheet metal work	320	2 306	51 274	191 980	178 343	103 409	78 456	13 637	3 175	6	6
1771	Concrete work	(S)	1 646	38 467	129 961	121 686	76 215	45 851	8 276	2 287	7	6
1781	Water well drilling	19	130	2 248	8 374	8 110	3 655	4 745	264	149	20	8
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	42	535	14 330	45 236	43 364	27 110	16 743	1 873	(S)	6	5
1793	Glass and glazing work	34	291	8 369	32 670	(D)	13 152	20 032	(D)	(D)	8	(D)
1794	Excavation work	153	710	17 232	70 178	64 076	40 323	24 075	6 102	3 173	9	8
1795	Wrecking and demolition work	8	(S)	(S)	(S)	(D)	(S)	1 636	(D)	(D)	(S)	(D)
1796	Installing building equipment, n.e.c.	50	500	15 208	55 605	53 706	43 822	9 966	1 899	456	11	4
1799	Special trade contractors, n.e.c.	(S)	1 600	36 032	109 603	103 500	74 777	30 337	6 102	2 466	9	8
	Portland–Vancouver, OR–WA											
	PMSA											
15,16,17	Construction industries	4 992	35 531	972 261	4 394 064	3 201 258	1 905 477	1 362 160	1 192 806	64 561	1	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	994	3 542	68 447	411 105	269 757	150 210	127 294	141 347	5 993	6	8
1522	Other residential buildings	82	646	18 367	84 625	42 774	23 427	21 903	41 851	859	34	18
1531	Operative builders	251	701	21 244	362 956	228 617	110 028	126 464	134 339	897	11	19
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	57	639	24 746	338 157	110 304	74 223	39 974	227 852	617	8	5
1542	Nonresidential buildings, n.e.c.	231	2 720	83 338	631 032	253 917	146 178	117 302	377 115	3 795	5	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	84	984	33 514	165 494	(D)	67 801	69 379	(D)	3 292	5	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1 797	(D)	(D)
1623	Water, sewer, and utility lines	99	1 732	56 935	183 029	162 007	109 670	52 639	21 022	8 374	3	4
1629	Heavy construction, n.e.c.	106	1 189	38 732	191 110	146 022	94 076	55 586	45 088	4 687	6	6

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16,17	PORTLAND–SALEM, OR–WA CMSA—Con.											
	Portland–Vancouver, OR–WA PMSA—Con.											
	Construction industries—Con.											
	Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning	453	4 877	156 878	522 864	453 466	247 298	212 968	69 398	5 095	3	2
	1721 Painting and paper hanging	299	1 460	26 684	71 288	68 984	48 860	20 293	2 304	1 635	8	7
	1731 Electrical work	348	4 072	137 163	385 880	373 139	237 816	137 016	12 741	6 526	3	2
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work	166	922	21 154	62 941	61 371	34 865	26 655	1 570	815	8	6
	1742 Plastering, drywall, and insulation work	194	2 287	53 869	140 250	128 998	88 823	43 671	11 252	1 422	8	5
	1743 Terrazzo, tile, marble, and mosaic work	66	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	175 Carpentry and floor work:											
	1751 Carpentry	412	1 640	31 576	129 837	110 812	62 193	50 983	19 025	5 466	8	9
	1752 Floor laying and other floor work	130	656	13 955	56 899	53 151	(D)	28 234	3 748	652	13	9
	1761 Roofing, siding, and sheet metal work	263	1 997	46 242	170 575	158 403	92 224	69 700	12 172	(D)	6	6
	1771 Concrete work	(S)	1 445	33 858	115 005	108 159	68 322	40 217	6 846	2 048	8	6
	1781 Water well drilling	15	101	(D)	5 352	5 112	(D)	(D)	240	149	25	10
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection	35	494	13 333	42 431	40 594	25 291	15 792	1 837	(S)	6	5
	1793 Glass and glazing work	29	251	7 323	(D)	(D)	11 348	18 057	(D)	(D)	8	(D)
	1794 Excavation work	112	602	14 937	60 319	54 679	35 661	19 273	5 640	2 913	8	8
	1795 Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1796 Installing building equipment, n.e.c. ..	46	462	14 154	53 395	(D)	42 206	(D)	(D)	456	12	(D)
	1799 Special trade contractors, n.e.c.	(S)	1 523	34 943	(D)	(D)	72 736	28 835	(D)	(D)	9	(D)
	Salem, OR PMSA											
	15,16,17 Construction industries	969	5 380	126 038	678 261	495 596	274 806	226 619	182 665	7 893	5	7
	(See appropriate State for SIC detail.)											
	SEATTLE–TACOMA–BREMERTON, WA CMSA											
	15,16,17 Construction industries	10 669	82 634	2 384 821	10 963 886	7 917 400	4 754 065	3 444 067	3 046 486	141 175	1	1
15	Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses	2 590	7 795	151 838	918 093	627 458	352 978	298 758	290 635	7 705	4	4
	1522 Other residential buildings	162	898	21 427	156 466	98 526	47 621	52 469	57 940	869	10	15
	1531 Operative builders	607	3 812	115 914	1 389 456	812 385	557 750	315 047	577 071	6 811	5	8
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses	111	2 865	115 981	873 436	476 067	246 641	239 506	397 369	2 180	4	2
	1542 Nonresidential buildings, n.e.c.	550	7 179	235 074	1 799 604	713 392	351 488	370 799	1 086 212	8 529	4	2
16	Heavy construction other than building construction—contractors:											
	1611 Highway and street construction	119	2 941	109 218	408 000	332 423	229 711	138 140	75 578	21 902	3	2
	162 Heavy construction, except highway:											
	1622 Bridge, tunnel, and elevated highway construction	13	856	41 502	155 587	128 479	91 635	38 939	27 107	2 320	2	1
	1623 Water, sewer, and utility lines	148	3 023	106 089	404 616	337 021	240 098	109 877	67 596	18 146	2	2
	1629 Heavy construction, n.e.c.	243	5 820	196 670	904 253	724 391	366 608	398 743	179 863	13 139	4	2

CONSTRUCTION—GEOGRAPHIC AREA SERIES

WASHINGTON WA—15

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.											
	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	954	9 244	299 996	994 632	876 609	527 239	379 951	118 023	10 536	2	2
1721	Painting and paper hanging	679	3 390	69 438	176 266	169 899	120 352	50 182	6 367	5 432	8	5
1731	Electrical work	720	9 241	293 872	810 660	773 637	438 262	342 434	37 023	9 541	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	252	1 478	33 415	104 525	100 829	62 152	39 122	*3 697	3 261	8	7
1742	Plastering, drywall, and insulation work	446	5 417	134 619	355 084	336 684	220 450	117 626	18 401	3 842	4	3
1743	Terrazzo, tile, marble, and mosaic work	129	698	16 639	51 605	(D)	26 365	24 993	(D)	474	12	(D)
175	Carpentry and floor work:											
1751	Carpentry	829	3 085	67 388	215 622	196 950	133 322	70 311	18 673	2 049	5	5
1752	Floor laying and other floor work	245	1 156	24 234	108 862	96 822	49 194	49 579	12 040	517	6	4
1761	Roofing, siding, and sheet metal work	550	3 754	85 580	313 151	298 083	169 686	129 738	15 068	2 415	4	4
1771	Concrete work	458	2 356	55 892	168 723	160 690	102 786	61 122	8 033	3 905	5	5
1781	Water well drilling	60	325	6 795	(D)	(D)	12 897	12 081	(D)	2 052	18	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	1 005	37 969	107 272	95 266	66 261	38 064	12 006	(D)	8	7
1793	Glass and glazing work	85	584	16 187	56 712	56 469	29 296	28 569	243	446	9	8
1794	Excavation work	284	1 676	44 313	159 067	149 722	110 712	51 734	9 345	8 478	6	6
1795	Wrecking and demolition work	12	209	6 956	(D)	(D)	17 799	1 374	(D)	(Z)	(D)	(D)
1796	Installing building equipment, n.e.c.	37	1 027	29 617	86 255	(D)	58 848	21 667	(D)	(D)	3	(D)
1799	Special trade contractors, n.e.c.	353	2 798	68 196	200 740	183 572	123 912	63 243	17 168	4 011	5	5
	Bremerton, WA PMSA											
15,16, 17	Construction industries	748	3 085	67 790	300 877	246 432	137 917	119 730	54 445	5 474	7	6
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	206	598	8 433	52 252	37 206	18 842	19 226	15 046	(S)	19	17
1522	Other residential buildings	(S)	3	(S)	(S)	*217	*101	*116	(S)	(D)	(Z)	59
1531	Operative builders	69	180	3 691	41 013	29 111	17 157	12 608	11 901	260	31	27
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	*33	*544	(S)	(D)	(S)	(S)	(D)	(D)	70	(D)
1542	Nonresidential buildings, n.e.c.	*21	*136	*4 481	*18 877	*9 468	(S)	*6 841	*9 409	*286	51	51
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	*6	(D)	(D)	(S)	(S)	(S)	(S)	(S)	—	(D)	(S)
1629	Heavy construction, n.e.c.	(S)	(S)	(S)	(D)	*1 115	(S)	(S)	(D)	—	(S)	74
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	86	569	17 293	65 596	57 735	28 775	30 462	7 860	(S)	13	12
1721	Painting and paper hanging	(S)	*55	*366	*1 801	*1 629	*1 294	*335	*172	*168	60	51
1731	Electrical work	34	219	6 064	17 540	17 236	8 340	9 021	304	248	21	24
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	(S)	*20	(S)	(S)	(S)	*368	(S)	(S)	—	74	(S)
1742	Plastering, drywall, and insulation work	36	210	4 844	13 911	13 384	7 681	6 138	527	(S)	13	13
1743	Terrazzo, tile, marble, and mosaic work	*3	*18	*266	*984	*958	*500	*458	*26	*12	63	60
175	Carpentry and floor work:											
1751	Carpentry	60	102	1 325	7 446	6 832	3 524	*3 473	*613	*454	33	35
1752	Floor laying and other floor work	(S)	(S)	(S)	(D)	(D)	(S)	(S)	(S)	—	(S)	(D)
1761	Roofing, siding, and sheet metal work	(S)	(S)	2 752	(S)	(S)	(S)	(S)	(S)	62	(S)	(S)
1771	Concrete work	*26	170	(S)	(S)	(D)	(S)	(S)	(D)	(D)	34	(D)

WA-16 WASHINGTON

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.											
	Bremerton, WA PMSA—Con.											
15,16,17	Construction industries—Con.											
17	Special trade contractors—Con.											
1781	Water well drilling	*4	*44	(D)	*3 833	*3 722	(D)	*2 107	*111	*266	42	41
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	(S)	(D)	(S)	(S)	(S)	(D)	(D)	—	(S)	(D)	(S)
1793	Glass and glazing work	—	—	—	—	—	—	—	—	—	—	—
1794	Excavation work	30	118	2 209	10 279	8 544	6 784	*3 833	(S)	*918	31	34
1795	Wrecking and demolition work	—	—	—	—	—	—	—	—	—	—	—
1796	Installing building equipment, n.e.c. ..	—	—	—	—	—	—	—	—	—	—	—
1799	Special trade contractors, n.e.c.	*22	*88	1 908	*7 534	(D)	(D)	(D)	(D)	(D)	41	(D)
	Olympia, WA PMSA											
15,16,17	Construction industries	684	2 933	61 822	369 192	276 311	156 988	130 032	92 882	4 326	8	12
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	171	545	9 228	53 219	41 403	29 272	16 765	11 816	655	17	18
1522	Other residential buildings	*16	*52	*902	*3 667	*3 407	*1 881	(S)	(S)	(D)	61	66
1531	Operative builders	34	174	5 776	*92 741	*62 911	*28 885	34 982	*29 830	1 080	29	45
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	4	75	2 578	15 694	(D)	4 999	3 922	(D)	(D)	(Z)	(D)
1542	Nonresidential buildings, n.e.c.	54	272	7 891	65 408	28 718	15 368	13 499	36 690	1 202	23	13
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	*13	(D)	(D)	(D)	(D)	1 963	(D)	(D)	—	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1623	Water, sewer, and utility lines	(S)	(D)	(D)	5 124	(D)	2 447	2 481	(D)	30	(D)	(D)
1629	Heavy construction, n.e.c.	*21	*109	*1 850	(D)	*11 694	*4 464	*8 182	(D)	—	47	49
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	66	324	7 907	27 179	24 479	14 807	11 338	2 700	231	17	14
1721	Painting and paper hanging	56	*163	*2 522	*9 671	*8 519	*4 801	*3 765	(S)	178	48	42
1731	Electrical work	*19	*166	*2 838	*8 743	*8 660	*4 453	*4 207	*83	—	53	51
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	*13	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(S)
1742	Plastering, drywall, and insulation work	(S)	249	3 402	(S)	(S)	(S)	*6 984	109	(S)	37	(S)
1743	Terrazzo, tile, marble, and mosaic work	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(D)	*2	(S)	(D)
175	Carpentry and floor work:											
1751	Carpentry	46	*127	*1 522	6 799	6 446	*5 095	(S)	353	258	43	37
1752	Floor laying and other floor work ..	20	56	1 161	(D)	(D)	1 984	(S)	*160	*6	32	(D)
1761	Roofing, siding, and sheet metal work	35	182	4 918	18 083	17 568	10 586	7 869	515	*196	21	22
1771	Concrete work	*13	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
1781	Water well drilling	*12	(D)	(S)	(D)	(D)	(D)	(S)	(S)	*156	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	—	—	—	—	—	—	—	—	—	—	—
1793	Glass and glazing work	*6	*35	*534	(S)	(S)	(S)	(S)	—	—	74	(S)
1794	Excavation work	*22	*79	*2 055	*9 889	*9 499	*7 724	*2 316	*390	(D)	43	42
1795	Wrecking and demolition work	(S)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(D)
1796	Installing building equipment, n.e.c. ..	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	(S)	53	871	2 972	(D)	1 710	(D)	(D)	(D)	19	(D)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

WASHINGTON WA—17

Table 11. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.											
	Seattle-Bellevue-Everett, WA PMSA											
15,16,17	Construction industries	7 339	64 690	1 946 200	8 991 018	6 413 274	3 827 314	2 805 788	2 577 744	105 157	1	1
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 782	5 437	112 712	696 495	465 585	262 542	220 622	230 910	4 818	5	5
1522	Other residential buildings	111	726	18 618	143 769	88 241	43 504	45 973	55 528	615	11	16
1531	Operative builders	420	2 946	93 182	1 103 065	616 079	435 617	231 622	486 986	4 166	5	8
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	73	2 644	109 818	839 776	457 795	237 156	230 026	381 981	2 098	3	1
1542	Nonresidential buildings, n.e.c.	403	5 789	188 189	1 471 640	578 526	268 638	314 693	893 114	5 564	4	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	84	2 060	76 007	298 744	237 374	157 521	107 793	61 371	13 361	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	12	856	41 502	155 587	128 479	91 635	38 939	27 107	2 320	2	1
1623	Water, sewer, and utility lines	102	2 258	80 498	324 041	269 754	188 389	83 878	54 287	13 589	2	3
1629	Heavy construction, n.e.c.	170	5 349	185 700	843 576	(D)	341 923	377 310	(D)	12 307	4	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air-conditioning	647	7 013	237 573	761 718	677 495	416 050	285 163	84 223	8 891	3	2
1721	Painting and paper hanging	491	2 821	60 391	148 474	144 071	103 370	41 276	4 403	4 991	8	5
1731	Electrical work	532	7 532	245 000	677 709	644 410	359 086	290 092	33 298	7 682	2	2
174	Masonry, stone work, tile setting, and plastering:											
1741	Masonry, stone setting, and other stone work	176	1 104	27 140	83 072	79 800	48 513	31 676	*3 272	3 203	8	8
1742	Plastering, drywall, and insulation work	283	3 938	104 166	265 416	250 533	169 230	82 202	14 883	2 891	5	3
1743	Terrazzo, tile, marble, and mosaic work	101	563	14 207	43 444	41 751	21 723	21 519	1 693	(D)	12	12
175	Carpentry and floor work:											
1751	Carpentry	(S)	(S)	53 101	(S)	(S)	(S)	(S)	13 760	1 107	(S)	(S)
1752	Floor laying and other floor work	161	887	19 543	89 789	79 116	38 842	41 079	10 673	287	7	5
1761	Roofing, siding, and sheet metal work	358	2 744	63 520	226 982	217 309	123 970	93 600	9 673	1 581	5	4
1771	Concrete work	310	1 721	42 160	126 195	119 345	76 684	45 601	6 850	2 679	8	8
1781	Water well drilling	25	(D)	(D)	(D)	(D)	(D)	2 203	(D)	*49	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	29	(D)	(D)	(D)	(D)	65 357	(D)	12 006	1 369	(D)	(D)
1793	Glass and glazing work	62	424	11 658	39 013	38 788	21 776	18 159	225	277	11	8
1794	Excavation work	182	1 220	33 815	115 008	108 534	77 808	38 573	6 474	6 577	6	5
1795	Wrecking and demolition work	9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	31	950	28 251	82 684	(D)	56 540	20 643	(D)	(D)	3	(D)
1799	Special trade contractors, n.e.c.	(S)	2 272	56 373	166 500	150 720	103 905	50 362	15 780	3 389	5	5
	Tacoma, WA PMSA											
15,16,17	Construction industries	1 897	11 925	309 008	1 302 799	981 384	631 845	388 518	321 416	26 217	2	2
15	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	(S)	1 214	21 465	116 127	83 264	42 322	42 145	32 863	2 083	9	10
1522	Other residential buildings	(S)	118	(S)	(S)	(S)	*2 135	(S)	(S)	221	30	(S)
1531	Operative builders	85	512	13 265	152 637	104 284	76 091	35 835	48 353	1 305	15	17
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	*21	*113	*3 040	*13 635	*8 512	*5 772	2 753	5 123	(D)	53	52
1542	Nonresidential buildings, n.e.c.	71	982	34 514	243 679	96 680	61 119	35 766	147 000	1 477	5	4

WA-18 WASHINGTON

CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Selected Statistics for Establishments With Payroll for Selected Metropolitan Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡†	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16,17 16	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.											
	Tacoma, WA PMSA—Con.											
	Construction industries—Con.											
	Heavy construction other than building construction—contractors:											
	1611 Highway and street construction -----	20	607	24 675	81 401	69 290	(D)	23 892	12 111	(D)	4	3
	162 Heavy construction, except highway:											
	1622 Bridge, tunnel, and elevated highway construction-----	—	—	—	—	—	—	—	—	—	—	—
	1623 Water, sewer, and utility lines -----	27	677	23 323	73 181	(D)	47 608	22 909	(D)	4 527	5	(D)
	1629 Heavy construction, n.e.c. -----	(S)	325	8 517	47 492	(D)	18 906	12 494	(D)	832	12	(D)
	17 Special trade contractors:											
	1711 Plumbing, heating, and air-conditioning-----	(S)	1 338	37 223	140 139	116 900	67 606	52 988	*23 240	951	6	6
	1721 Painting and paper hanging-----	103	351	6 159	16 320	15 679	10 887	4 806	*641	94	14	14
	1731 Electrical work -----	134	1 325	39 970	106 668	103 331	66 383	39 114	3 337	1 611	3	3
	174 Masonry, stone work, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stone work-----	54	277	4 066	13 324	13 024	9 466	3 558	(S)	(D)	28	20
	1742 Plastering, drywall, and insulation work -----	95	1 019	22 207	61 821	58 940	36 682	22 302	2 882	634	10	8
	1743 Terrazzo, tile, marble, and mosaic work -----	*19	*91	*1 890	*5 855	(D)	*3 437	*2 452	(D)	(D)	58	(D)
	175 Carpentry and floor work:											
	1751 Carpentry-----	179	608	11 440	34 623	30 677	20 027	10 716	3 946	(S)	14	15
	1752 Floor laying and other floor work ---	53	(S)	(S)	11 841	10 758	6 394	5 480	1 083	224	(S)	9
	1761 Roofing, siding, and sheet metal work -----	98	673	14 390	53 380	50 014	28 493	21 711	3 366	576	10	8
	1771 Concrete work -----	110	438	10 874	32 890	32 040	20 530	11 784	850	1 145	22	25
	1781 Water well drilling -----	*19	206	4 332	14 869	(D)	7 512	6 817	(D)	1 581	26	(D)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection -----	1	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(D)
	1793 Glass and glazing work -----	17	126	3 995	15 010	14 992	6 112	9 128	18	169	10	18
	1794 Excavation work-----	50	259	6 235	23 891	23 145	18 396	*7 011	746	(D)	23	26
	1795 Wrecking and demolition work -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1796 Installing building equipment, n.e.c. -	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1799 Special trade contractors, n.e.c.-----	81	385	9 044	23 735	22 446	(D)	7 788	*1 288	(D)	13	14

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/ structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipples and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Appendix D. Metropolitan Areas

[Titles and definitions shown for MSA's, CMSA's, and PMSA's are those established by the Office of Management and Budget as of June 30, 1993]

Abilene, TX MSA

Taylor County, TX

Akron, OH PMSA—see Cleveland–Akron, OH CMSA

Albany, GA MSA

Dougherty County, GA
Lee County, GA

Albany–Schenectady–Troy, NY MSA

Albany County, NY
Montgomery County, NY
Rensselaer County, NY
Saratoga County, NY
Schenectady County, NY
Schoharie County, NY

Albuquerque, NM MSA

Bernalillo County, NM
Sandoval County, NM
Valencia County, NM

Alexandria, LA MSA

Rapides Parish, LA

Allentown–Bethlehem–Easton, PA MSA

Carbon County, PA
Lehigh County, PA
Northampton County, PA

Altoona, PA MSA

Blair County, PA

Amarillo, TX MSA

Potter County, TX
Randall County, TX

Anchorage, AK MSA

Anchorage Borough, AK

Ann Arbor, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Anniston, AL MSA

Calhoun County, AL

Appleton–Oshkosh–Neenah, WI MSA

Calumet County, WI
Outagamie County, WI
Winnebago County, WI

Asheville, NC MSA

Buncombe County, NC
Madison County, NC

Athens, GA MSA

Clarke County, GA
Madison County, GA
Oconee County, GA

Atlanta, GA MSA

Barrow County, GA
Bartow County, GA

Atlanta, GA MSA—Con.

Carroll County, GA
Cherokee County, GA
Clayton County, GA
Cobb County, GA
Coweta County, GA
DeKalb County, GA
Douglas County, GA
Fayette County, GA
Forsyth County, GA
Fulton County, GA
Gwinnett County, GA
Henry County, GA
Newton County, GA
Paulding County, GA
Pickens County, GA
Rockdale County, GA
Spalding County, GA
Walton County, GA

Atlantic–Cape May, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Augusta–Aiken, GA–SC MSA

Columbia County, GA
McDuffie County, GA
Richmond County, GA
Aiken County, SC
Edgefield County, SC

Austin–San Marcos, TX MSA

Bastrop County, TX
Caldwell County, TX
Hays County, TX
Travis County, TX
Williamson County, TX

Bakersfield, CA MSA

Kern County, CA

Baltimore, MD PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA

Bangor, ME MSA

Penobscot County, ME (part)
Bangor city, ME
Brewer city, ME
Eddington town, ME
Glenburn town, ME
Hampden town, ME
Hermon town, ME
Holden town, ME
Kenduskeag town, ME
Milford town, ME
Old Town city, ME
Orono town, ME
Orrington town, ME
Penobscot Indian Island Reservation, ME
Veazie town, ME

Bangor, ME MSA—Con.

Waldo County, ME (part)
Winterport town, ME

Barnstable–Yarmouth, MA MSA

Barnstable County, MA (part)
Barnstable city, MA
Brewster town, MA
Chatham town, MA
Dennis town, MA
Eastham town, MA
Harwich town, MA
Mashpee town, MA
Orleans town, MA
Sandwich town, MA
Yarmouth town, MA

Baton Rouge, LA MSA

Ascension Parish, LA
East Baton Rouge Parish, LA
Livingston Parish, LA
West Baton Rouge Parish, LA

Beaumont–Port Arthur, TX MSA

Hardin County, TX
Jefferson County, TX
Orange County, TX

Bellingham, WA MSA

Whatcom County, WA

Benton Harbor, MI MSA

Berrien County, MI

Bergen–Passaic, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Billings, MT MSA

Yellowstone County, MT

Biloxi–Gulfport–Pascagoula, MS MSA

Hancock County, MS
Harrison County, MS
Jackson County, MS

Binghamton, NY MSA

Broome County, NY
Tioga County, NY

Birmingham, AL MSA

Blount County, AL
Jefferson County, AL
St. Clair County, AL
Shelby County, AL

Bismarck, ND MSA

Burleigh County, ND
Morton County, ND

Bloomington, IN MSA

Monroe County, IN

Bloomington–Normal, IL MSA

McLean County, IL

Boise City, ID MSA

Ada County, ID

Canyon County, ID

**Boston, MA–NH PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA**

Boston, MA–NH PMSA

Bristol County, MA (part)

Berkley town, MA

Dighton town, MA

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Essex town, MA

Gloucester city, MA

Hamilton town, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Manchester town, MA

Marblehead town, MA

Middleton town, MA

Nahant town, MA

Newbury town, MA

Newburyport city, MA

Peabody city, MA

Rockport town, MA

Rowley town, MA

Salem city, MA

Salisbury town, MA

Saugus town, MA

Swampscott town, MA

Topsfield town, MA

Wenham town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Holliston town, MA

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Lincoln town, MA

Littleton town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Sherborn town, MA

Shirley town, MA

Somerville city, MA

Stoneham town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Middlesex County, MA (part)

Stow town, MA

Sudbury town, MA

Townsend town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

Winchester town, MA

Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Cohasset town, MA

Dedham town, MA

Dover town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Millis town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Plainville town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Norwell town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

Suffolk County, MA

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA

Blackstone town, MA

Bolton town, MA

Harvard town, MA

Hopedale town, MA

Lancaster town, MA

Mendon town, MA

Milford town, MA

Millville town, MA

Southborough town, MA

Upton town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Rockingham County, NH (part)

Seabrook town, NH

South Hampton town, NH

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Halifax town, MA

Hanson town, MA

Lakeville town, MA

Middleborough town, MA

Plympton town, MA

West Bridgewater town, MA

Whitman town, MA

Fitchburg–Leominster, MA PMSA

Middlesex County, MA (part)

Ashby town, MA

Worcester County, MA (part)

Ashburnham town, MA

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lunenburg town, MA

Templeton town, MA

Westminster town, MA

Winchendon town, MA

Lawrence, MA–NH PMSA

Essex County, MA (part)

Andover town, MA

Boxford town, MA

Georgetown town, MA

Groveland town, MA

Haverhill city, MA

Lawrence city, MA

Merrimac town, MA

Methuen city, MA

North Andover town, MA

West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH

Chester town, NH

Danville town, NH

Derry town, NH

Fremont town, NH

Hampstead town, NH

Kingston town, NH

Newton town, NH

Plaistow town, NH

Raymond town, NH

Salem town, NH

Sandown town, NH

Windham town, NH

Lowell, MA–NH PMSA

Middlesex County, MA (part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Dunstable town, MA

Groton town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Tyngsborough town, MA

Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Manchester, NH PMSA
 Hillsborough County, NH (part)
 Bedford town, NH
 Goffstown town, NH
 Manchester city, NH
 Weare town, NH
 Merrimack County, NH (part)
 Allentown town, NH
 Hooksett town, NH
 Rockingham County, NH (part)
 Auburn town, NH
 Candia town, NH
 Londonderry town, NH
 Nashua, NH PMSA
 Hillsborough County, NH (part)
 Amherst town, NH
 Brookline town, NH
 Greenville town, NH
 Hollis town, NH
 Hudson town, NH
 Litchfield town, NH
 Mason town, NH
 Merrimack town, NH
 Milford town, NH
 Mont Vernon town, NH
 Nashua city, NH
 New Ipswich town, NH
 Wilton town, NH
 New Bedford, MA PMSA
 Bristol County, MA (part)
 Acushnet town, MA
 Dartmouth town, MA
 Fairhaven town, MA
 Freetown town, MA
 New Bedford city, MA
 Plymouth County, MA (part)
 Marion town, MA
 Mattapoisett town, MA
 Rochester town, MA
 Portsmouth–Rochester, NH–ME PMSA
 York County, ME (part)
 Berwick town, ME
 Eliot town, ME
 Kittery town, ME
 South Berwick town, ME
 York town, ME
 Rockingham County, NH (part)
 Brentwood town, NH
 East Kingston town, NH
 Epping town, NH
 Exeter town, NH
 Greenland town, NH
 Hampton town, NH
 Hampton Falls town, NH
 Kensington town, NH
 New Castle town, NH
 Newfields town, NH
 Newington town, NH
 Newmarket town, NH
 North Hampton town, NH
 Portsmouth city, NH
 Rye town, NH
 Stratham town, NH
 Strafford County, NH (part)
 Barrington town, NH
 Dover city, NH
 Durham town, NH
 Farmington town, NH
 Lee town, NH
 Madbury town, NH
 Milton town, NH
 Rochester city, NH
 Rollinsford town, NH
 Somersworth city, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Worcester, MA–CT PMSA
 Windham County, CT (part)
 Thompson town, CT
 Hampden County, MA (part)
 Holland town, MA
 Worcester County, MA (part)
 Auburn town, MA
 Barre town, MA
 Boylston town, MA
 Brookfield town, MA
 Charlton town, MA
 Clinton town, MA
 Douglas town, MA
 Dudley town, MA
 East Brookfield town, MA
 Grafton town, MA
 Holden town, MA
 Leicester town, MA
 Millbury town, MA
 Northborough town, MA
 Northbridge town, MA
 North Brookfield town, MA
 Oakham town, MA
 Oxford town, MA
 Paxton town, MA
 Princeton town, MA
 Rutland town, MA
 Shrewsbury town, MA
 Southbridge town, MA
 Spencer town, MA
 Sterling town, MA
 Sturbridge town, MA
 Sutton town, MA
 Uxbridge town, MA
 Webster town, MA
 Westborough town, MA
 West Boylston town, MA
 West Brookfield town, MA
 Worcester city, MA

**Boulder–Longmont, CO PMSA—see
Denver–Boulder–Greeley, CO CMSA****Brazoria, TX PMSA—see Houston–
Galveston–Brazoria, TX CMSA****Bremerton, WA PMSA—see Seattle–
Tacoma–Bremerton, WA CMSA****Bridgeport, CT PMSA—see New York–
Northern New Jersey–Long Island, NY–
NJ–CT–PA CMSA****Brockton, MA PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Brownsville–Harlingen–San Benito, TX MSA**
Cameron County, TX**Bryan–College Station, TX MSA**
Brazos County, TX**Buffalo–Niagara Falls, NY MSA**
Erie County, NY
Niagara County, NY

Burlington, VT MSA
 Chittenden County, VT (part)
 Burlington city, VT
 Charlotte town, VT
 Colchester town, VT
 Essex Junction village, VT
 Essex town balance, VT
 Hinesburg town, VT
 Jericho town, VT
 Jericho village, VT
 Milton town, VT
 Milton village, VT
 Richmond town, VT
 St. George town, VT
 Shelburne town, VT

Burlington, VT MSA—Con.
 Chittenden County, VT (part)—Con.
 South Burlington city, VT
 Williston town, VT
 Winooski city, VT
 Franklin County, VT (part)
 Fairfax town, VT
 Georgia town, VT
 St. Albans city, VT
 St. Albans town, VT
 Swanton town, VT
 Swanton village, VT
 Grand Isle County, VT (part)
 Grand Isle town, VT
 South Hero town, VT

Canton–Massillon, OH MSA
Carroll County, OH
Stark County, OH**Casper, WY MSA**
Natrona County, WY**Cedar Rapids, IA MSA**
Linn County, IA**Champaign–Urbana, IL MSA**
Champaign County, IL**Charleston–North Charleston, SC MSA**
Berkeley County, SC
Charleston County, SC
Dorchester County, SC**Charleston, WV MSA**
Kanawha County, WV
Putnam County, WV**Charlotte–Gastonia–Rock Hill, NC–SC MSA**
Cabarrus County, NC
Gaston County, NC
Lincoln County, NC
Mecklenburg County, NC
Rowan County, NC
Union County, NC
York County, SC**Charlottesville, VA MSA**
Albemarle County, VA
Fluvanna County, VA
Greene County, VA
Charlottesville city, VA**Chattanooga, TN–GA MSA**
Catoosa County, GA
Dade County, GA
Walker County, GA
Hamilton County, TN
Marion County, TN**Cheyenne, WY MSA**
Laramie County, WY**Chicago, IL PMSA—see Chicago–Gary–
Kenosha, IL–IN–WI CMSA**

Chicago–Gary–Kenosha, IL–IN–WI CMSA
 Chicago, IL PMSA
 Cook County, IL
 DeKalb County, IL
 DuPage County, IL
 Grundy County, IL
 Kane County, IL
 Kendall County, IL
 Lake County, IL
 McHenry County, IL
 Will County, IL
 Gary, IN PMSA
 Lake County, IN
 Porter County, IN
 Kankakee, IL PMSA
 Kankakee County, IL

Chicago–Gary–Kenosha, IL–IN–WI CMSA—Con.

Kenosha, WI PMSA
Kenosha County, WI

Chico–Paradise, CA MSA

Butte County, CA

Cincinnati, OH–KY–IN PMSA—see

Cincinnati–Hamilton, OH–KY–IN CMSA

Cincinnati–Hamilton, OH–KY–IN CMSA

Cincinnati, OH–KY–IN PMSA
Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH
Hamilton–Middletown, OH PMSA
Butler County, OH

Clarksville–Hopkinsville, TN–KY MSA

Christian County, KY
Montgomery County, TN

Cleveland–Lorain–Elyria, OH PMSA—see

Cleveland–Akron, OH CMSA

Cleveland–Akron, OH CMSA

Akron, OH PMSA
Portage County, OH
Summit County, OH
Cleveland–Lorain–Elyria, OH PMSA
Ashtabula County, OH
Cuyahoga County, OH
Geauga County, OH
Lake County, OH
Lorain County, OH
Medina County, OH

Colorado Springs, CO MSA

El Paso County, CO

Columbia, MO MSA

Boone County, MO

Columbia, SC MSA

Lexington County, SC
Richland County, SC

Columbus, GA–AL MSA

Russell County, AL
Chattahoochee County, GA
Harris County, GA
Muscooke County, GA

Columbus, OH MSA

Delaware County, OH
Fairfield County, OH
Franklin County, OH
Licking County, OH
Madison County, OH
Pickaway County, OH

Corpus Christi, TX MSA

Nueces County, TX
San Patricio County, TX

Cumberland, MD–WV MSA

Allegany County, MD
Mineral County, WV

Dallas, TX PMSA—see Dallas–Fort Worth, TX CMSA

Dallas–Fort Worth, TX CMSA

Dallas, TX PMSA
Collin County, TX
Dallas County, TX
Denton County, TX
Ellis County, TX
Henderson County, TX
Hunt County, TX
Kaufman County, TX
Rockwall County, TX
Fort Worth–Arlington, TX PMSA
Hood County, TX
Johnson County, TX
Parker County, TX
Tarrant County, TX

Danbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Danville, VA MSA

Pittsylvania County, VA
Danville city, VA

Davenport–Moline–Rock Island, IA–IL MSA

Henry County, IL
Rock Island County, IL
Scott County, IA

Dayton–Springfield, OH MSA

Clark County, OH
Greene County, OH
Miami County, OH
Montgomery County, OH

Daytona Beach, FL MSA

Flagler County, FL
Volusia County, FL

Decatur, AL MSA

Lawrence County, AL
Morgan County, AL

Decatur, IL MSA

Macon County, IL

Denver, CO PMSA—see Denver–Boulder–Greeley, CO CMSA

Denver–Boulder–Greeley, CO CMSA

Boulder–Longmont, CO PMSA
Boulder County, CO
Denver, CO PMSA
Adams County, CO
Arapahoe County, CO
Denver County, CO
Douglas County, CO
Jefferson County, CO
Greeley, CO PMSA
Weld County, CO

Des Moines, IA MSA

Dallas County, IA
Polk County, IA
Warren County, IA

Detroit, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Detroit–Ann Arbor–Flint, MI CMSA

Ann Arbor, MI PMSA
Lenawee County, MI
Livingston County, MI
Washtenaw County, MI
Detroit, MI PMSA
Lapeer County, MI
Macomb County, MI
Monroe County, MI
Oakland County, MI
St. Clair County, MI
Wayne County, MI

Detroit–Ann Arbor–Flint, MI CMSA—Con.

Flint, MI PMSA
Genesee County, MI

Dothan, AL MSA

Dale County, AL
Houston County, AL

Dover, DE MSA

Kent County, DE

Dubuque, IA MSA

Dubuque County, IA

Duluth–Superior, MN–WI MSA

St. Louis County, MN
Douglas County, WI

Dutchess County, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Eau Claire, WI MSA

Chippewa County, WI
Eau Claire County, WI

El Paso, TX MSA

El Paso County, TX

Elkhart–Goshen, IN MSA

Elkhart County, IN

Elmira, NY MSA

Chemung County, NY

Enid, OK MSA

Garfield County, OK

Erie, PA MSA

Erie County, PA

Eugene–Springfield, OR MSA

Lane County, OR

Evansville–Henderson, IN–KY MSA

Posey County, IN
Vanderburgh County, IN
Warrick County, IN
Henderson County, KY

Fargo–Moorhead, ND–MN MSA

Clay County, MN
Cass County, ND

Fayetteville, NC MSA

Cumberland County, NC

Fayetteville–Springdale–Rogers, AR MSA

Benton County, AR
Washington County, AR

Fitchburg–Leominster, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Flint, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Florence, AL MSA

Colbert County, AL
Lauderdale County, AL

Florence, SC MSA

Florence County, SC

Fort Collins–Loveland, CO MSA

Larimer County, CO

Fort Lauderdale, FL PMSA—see Miami–Fort Lauderdale, FL CMSA

Fort Myers–Cape Coral, FL MSA

Lee County, FL

Fort Pierce–Port St. Lucie, FL MSA

Martin County, FL
St. Lucie County, FL

Fort Smith, AR—OK MSA

Crawford County, AR
Sebastian County, AR
Sequoyah County, OK

Fort Walton Beach, FL MSA

Okaloosa County, FL

Fort Wayne, IN MSA

Adams County, IN
Allen County, IN
De Kalb County, IN
Huntington County, IN
Wells County, IN
Whitley County, IN

Fort Worth—Arlington, TX PMSA—see

Dallas—Fort Worth, TX CMSA

Fresno, CA MSA

Fresno County, CA
Madera County, CA

Gadsden, AL MSA

Etowah County, AL

Gainesville, FL MSA

Alachua County, FL

**Galveston—Texas City, TX PMSA—see
Houston—Galveston—Brazoria, TX CMSA****Gary, IN PMSA—see Chicago—Gary—
Kenosha, IL—IN—WI CMSA****Glens Falls, NY MSA**

Warren County, NY
Washington County, NY

Goldsboro, NC MSA

Wayne County, NC

Grand Forks, ND—MN MSA

Polk County, MN
Grand Forks County, ND

Grand Rapids—Muskegon—Holland, MI MSA

Allegan County, MI
Kent County, MI
Muskegon County, MI
Ottawa County, MI

Great Falls, MT MSA

Cascade County, MT

**Greeley, CO PMSA—see Denver—Boulder—
Greeley, CO CMSA****Green Bay, WI MSA**

Brown County, WI

**Greensboro—Winston-Salem—High Point, NC
MSA**

Alamance County, NC
Davidson County, NC
Davie County, NC
Forsyth County, NC
Guilford County, NC
Randolph County, NC
Stokes County, NC
Yadkin County, NC

Greenville, NC MSA

Pitt County, NC

Greenville—Spartanburg—Anderson, SC MSA

Anderson County, SC
Cherokee County, SC
Greenville County, SC
Pickens County, SC
Spartanburg County, SC

**Hagerstown, MD PMSA—see Washington—
Baltimore, DC—MD—VA—WV CMSA****Hamilton—Middletown, OH PMSA—see
Cincinnati—Hamilton, OH—KY—IN CMSA****Harrisburg—Lebanon—Carlisle, PA MSA**

Cumberland County, PA
Dauphin County, PA
Lebanon County, PA
Perry County, PA

Hartford, CT MSA

Hartford County, CT (part)
Avon town, CT
Berlin town, CT
Bloomfield town, CT
Bristol city, CT
Burlington town, CT
Canton town, CT
East Granby town, CT
East Hartford town, CT
East Windsor town, CT
Enfield town, CT
Farmington town, CT
Glastonbury town, CT
Granby town, CT
Hartford city, CT
Manchester town, CT
Marlborough town, CT
New Britain city, CT
Newington town, CT
Plainville town, CT
Rocky Hill town, CT
Simsbury town, CT
Southington town, CT
South Windsor town, CT
Suffield town, CT
West Hartford town, CT
Wethersfield town, CT
Windsor town, CT
Windsor Locks town, CT

Litchfield County, CT (part)
Barkhamsted town, CT
Harwinton town, CT
New Hartford town, CT
Plymouth town, CT
Winchester town, CT

Middlesex County, CT (part)
Cromwell town, CT
Durham town, CT
East Haddam town, CT
East Hampton town, CT
Haddam town, CT
Middlefield town, CT
Middletown city, CT
Portland town, CT

New London County, CT (part)
Colchester town, CT
Lebanon town, CT

Tolland County, CT (part)
Andover town, CT
Bolton town, CT
Columbia town, CT
Coventry town, CT
Ellington town, CT
Hebron town, CT
Mansfield town, CT
Somers town, CT
Stafford town, CT
Tolland town, CT
Vernon town, CT
Willington town, CT

Windham County, CT (part)
Ashford town, CT
Chaplin town, CT
Windham town, CT

Hickory—Morganton, NC MSA

Alexander County, NC
Burke County, NC
Caldwell County, NC
Catawba County, NC

Honolulu, HI MSA

Honolulu County, HI

Houma, LA MSA

Lafourche Parish, LA
Terrebonne Parish, LA

**Houston, TX PMSA—see Houston—Galveston—
Brazoria, TX CMSA****Houston—Galveston—Brazoria, TX CMSA**

Brazoria, TX PMSA
Brazoria County, TX
Galveston—Texas City, TX PMSA
Galveston County, TX
Houston, TX PMSA
Chambers County, TX
Fort Bend County, TX
Harris County, TX
Liberty County, TX
Montgomery County, TX
Waller County, TX

Huntington—Ashland, WV—KY—OH MSA

Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Huntsville, AL MSA

Limestone County, AL
Madison County, AL

Indianapolis, IN MSA

Boone County, IN
Hamilton County, IN
Hancock County, IN
Hendricks County, IN
Johnson County, IN
Madison County, IN
Marion County, IN
Morgan County, IN
Shelby County, IN

Iowa City, IA MSA

Johnson County, IA

Jackson, MI MSA

Jackson County, MI

Jackson, MS MSA

Hinds County, MS
Madison County, MS
Rankin County, MS

Jackson, TN MSA

Madison County, TN

Jacksonville, FL MSA

Clay County, FL
Duval County, FL
Nassau County, FL
St. Johns County, FL

Jacksonville, NC MSA

Onslow County, NC

Jamestown, NY MSA

Chautauqua County, NY

Janesville—Beloit, WI MSA

Rock County, WI

Jersey City, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Johnson City–Kingsport–Bristol, TN–VA MSA

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol city, VA

Johnstown, PA MSA

Cambria County, PA
Somerset County, PA

Joplin, MO MSA

Jasper County, MO
Newton County, MO

Kalamazoo–Battle Creek, MI MSA

Calhoun County, MI
Kalamazoo County, MI
Van Buren County, MI

Kankakee, IL PMSA—see Chicago–Gary–Kenosha, IL–IN–WI CMSA

Kansas City, MO–KS MSA

Johnson County, KS
Leavenworth County, KS
Miami County, KS
Wyandotte County, KS
Cass County, MO
Clay County, MO
Clinton County, MO
Jackson County, MO
Lafayette County, MO
Platte County, MO
Ray County, MO

Kenosha, WI PMSA—see Chicago–Gary–Kenosha, IL–IN–WI CMSA

Killeen–Temple, TX MSA

Bell County, TX
Coryell County, TX

Knoxville, TN MSA

Anderson County, TN
Blount County, TN
Knox County, TN
Loudon County, TN
Sevier County, TN
Union County, TN

Kokomo, IN MSA

Howard County, IN
Tipton County, IN

La Crosse, WI–MN MSA

Houston County, MN
La Crosse County, WI

Lafayette, LA MSA

Acadia Parish, LA
Lafayette Parish, LA
St. Landry Parish, LA
St. Martin Parish, LA

Lafayette, IN MSA

Clinton County, IN
Tippecanoe County, IN

Lake Charles, LA MSA

Calcasieu Parish, LA

Lakeland–Winter Haven, FL MSA

Polk County, FL

Lancaster, PA MSA

Lancaster County, PA

Lansing–East Lansing, MI MSA

Clinton County, MI
Eaton County, MI
Ingham County, MI

Laredo, TX MSA

Webb County, TX

Las Cruces, NM MSA

Dona Ana County, NM

Las Vegas, NV–AZ MSA

Mohave County, AZ
Clark County, NV
Nye County, NV

Lawrence, KS MSA

Douglas County, KS

Lawrence, MA–NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Lawton, OK MSA

Comanche County, OK

Lewiston–Auburn, ME MSA

Androscoggin County, ME (part)
Auburn city, ME
Greene town, ME
Lewiston city, ME
Lisbon town, ME
Mechanic Falls town, ME
Poland town, ME
Sabattus town, ME
Turner town, ME
Wales town, ME

Lexington, KY MSA

Bourbon County, KY
Clark County, KY
Fayette County, KY
Jessamine County, KY
Madison County, KY
Scott County, KY
Woodford County, KY

Lima, OH MSA

Allen County, OH
Auglaize County, OH

Lincoln, NE MSA

Lancaster County, NE

Little Rock–North Little Rock, AR MSA

Faulkner County, AR
Lonoke County, AR
Pulaski County, AR
Saline County, AR

Longview–Marshall, TX MSA

Gregg County, TX
Harrison County, TX
Upshur County, TX

Los Angeles–Riverside–Orange County, CA CMSA

Los Angeles–Long Beach, CA PMSA
Los Angeles County, CA
Orange County, CA PMSA
Orange County, CA
Riverside–San Bernardino, CA PMSA
Riverside County, CA
San Bernardino County, CA
Ventura, CA PMSA
Ventura County, CA

Los Angeles–Long Beach, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Louisville, KY–IN MSA

Clark County, IN
Floyd County, IN
Harrison County, IN
Scott County, IN
Bullitt County, KY
Jefferson County, KY
Oldham County, KY

Lowell, MA–NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Lubbock, TX MSA

Lubbock County, TX

Lynchburg, VA MSA

Amherst County, VA
Bedford County, VA
Campbell County, VA
Bedford city, VA
Lynchburg city, VA

Macon, GA MSA

Bibb County, GA
Houston County, GA
Jones County, GA
Peach County, GA
Twiggs County, GA

Madison, WI MSA

Dane County, WI

Manchester, NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Mansfield, OH MSA

Crawford County, OH
Richland County, OH

McAllen–Edinburg–Mission, TX MSA

Hidalgo County, TX

Medford–Ashland, OR MSA

Jackson County, OR

Melbourne–Titusville–Palm Bay, FL MSA

Brevard County, FL

Memphis, TN–AR–MS MSA

Crittenden County, AR
DeSoto County, MS
Fayette County, TN
Shelby County, TN
Tipton County, TN

Merced, CA MSA

Merced County, CA

Miami–Fort Lauderdale, FL CMSA

Fort Lauderdale, FL PMSA
Broward County, FL
Miami, FL PMSA
Dade County, FL

Miami, FL PMSA—see Miami–Fort Lauderdale, FL CMSA

Middlesex–Somerset–Hunterdon, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Milwaukee–Waukesha, WI PMSA—see Milwaukee–Racine, WI CMSA

Milwaukee–Racine, WI CMSA

Milwaukee–Waukesha, WI PMSA
Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI

Milwaukee–Racine, WI CMSA—Con.

Racine, WI PMSA
Racine County, WI

Minneapolis–St. Paul, MN–WI MSA

Anoka County, MN
Carver County, MN
Chisago County, MN
Dakota County, MN
Hennepin County, MN
Isanti County, MN
Ramsey County, MN
Scott County, MN
Sherburne County, MN
Washington County, MN
Wright County, MN
Pierce County, WI
St. Croix County, WI

Mobile, AL MSA

Baldwin County, AL
Mobile County, AL

Modesto, CA MSA

Stanislaus County, CA

Monmouth–Ocean, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Monroe, LA MSA**

Ouachita Parish, LA

Montgomery, AL MSA

Autauga County, AL
Elmore County, AL
Montgomery County, AL

Muncie, IN MSA

Delaware County, IN

Myrtle Beach, SC MSA

Horry County, SC

Naples, FL MSA

Collier County, FL

Nashua, NH PMSA—see Boston–**Worcester–Lawrence, MA–NH–ME–CT CMSA****Nashville, TN MSA**

Cheatham County, TN
Davidson County, TN
Dickson County, TN
Robertson County, TN
Rutherford County, TN
Sumner County, TN
Williamson County, TN
Wilson County, TN

Nassau–Suffolk, NY PMSA—see New**York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New Bedford, MA PMSA—see Boston–****Worcester–Lawrence, MA–NH–ME–CT CMSA****New Haven–Meriden, CT PMSA—see New****York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New London–Norwich, CT–RI MSA**

Middlesex County, CT (part)
Fenwick borough, CT
Old Saybrook town, CT
New London County, CT (part)
Bozrah town, CT
East Lyme town, CT
Franklin town, CT
Griswold town balance, CT
Groton city, CT
Groton town balance, CT

New London–Norwich, CT–RI MSA—Con.

New London County, CT (part)—Con.
Groton Long Point borough, CT
Jewett City borough, CT
Ledyard town, CT
Lisbon town, CT
Montville town, CT
New London city, CT
North Stonington town, CT
Norwich city, CT
Old Lyme town, CT
Preston town, CT
Salem town, CT
Sprague town, CT
Stonington borough, CT
Stonington town, CT
Waterford town, CT
Windham County, CT (part)
Canterbury town, CT
Plainfield town, CT
Washington County, RI (part)
Hopkinton town, RI
Westerly town, RI

New Orleans, LA MSA

Jefferson Parish, LA
Orleans Parish, LA
Plaquemines Parish, LA
St. Bernard Parish, LA
St. Charles Parish, LA
St. James Parish, LA
St. John the Baptist Parish, LA
St. Tammany Parish, LA

New York, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**

Bergen–Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (part)
Bridgeport city, CT
Easton town, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (part)
Ansonia city, CT
Beacon Falls town, CT
Derby city, CT
Milford city (balance), CT
Oxford town, CT
Seymour town, CT
Woodmont borough, CT
Danbury, CT PMSA
Fairfield County, CT (part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown borough, CT
Newtown town, CT
Redding town, CT
Ridgefield town, CT
Sherman town, CT
Litchfield County, CT (part)
Bridgewater town, CT
New Milford town, CT
Roxbury town, CT
Washington town, CT
Dutchess County, NY PMSA
Dutchess County, NY

New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA—Con.

Jersey City, NJ PMSA
Hudson County, NJ
Middlesex–Somerset–Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth–Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau–Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY
New Haven–Meriden, CT PMSA
Middlesex County, CT (part)
Clinton town, CT
Killingworth town, CT
New Haven County, CT (part)
Bethany town, CT
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT
Woodbridge town, CT
New York, NY PMSA
Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY
Queens County, NY
Richmond County, NY
Rockland County, NY
Westchester County, NY
Newark, NJ PMSA
Essex County, NJ
Morris County, NJ
Sussex County, NJ
Union County, NJ
Warren County, NJ
Newburgh, NY–PA PMSA
Orange County, NY
Pike County, PA
Stamford–Norwalk, CT PMSA
Fairfield County, CT (part)
Darien town, CT
Greenwich town, CT
New Canaan town, CT
Norwalk city, CT
Stamford city, CT
Weston town, CT
Westport town, CT
Wilton town, CT
Trenton, NJ PMSA
Mercer County, NJ
Waterbury, CT PMSA
Litchfield County, CT (part)
Bethlehem town, CT
Thomaston town, CT
Watertown town, CT
Woodbury town, CT
New Haven County, CT (part)
Middlebury town, CT
Naugatuck borough, CT
Prospect town, CT
Southbury town, CT
Waterbury city, CT
Wolcott town, CT

Newark, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Newburgh, NY–PA PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Norfolk–Virginia Beach–Newport News, VA–NC MSA

Currituck County, NC
Gloucester County, VA
Isle of Wight County, VA
James City County, VA
Mathews County, VA
York County, VA
Chesapeake city, VA
Hampton city, VA
Newport News city, VA
Norfolk city, VA
Poquoson city, VA
Portsmouth city, VA
Suffolk city, VA
Virginia Beach city, VA
Williamsburg city, VA

Oakland, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Ocala, FL MSA

Marion County, FL

Odessa–Midland, TX MSA

Ector County, TX
Midland County, TX

Oklahoma City, OK MSA

Canadian County, OK
Cleveland County, OK
Logan County, OK
McClain County, OK
Oklahoma County, OK
Pottawatomie County, OK

Olympia, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Omaha, NE–IA MSA

Pottawattamie County, IA
Cass County, NE
Douglas County, NE
Sarpy County, NE
Washington County, NE

Orange County, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Orlando, FL MSA

Lake County, FL
Orange County, FL
Osceola County, FL
Seminole County, FL

Owensboro, KY MSA

Daviess County, KY

Panama City, FL MSA

Bay County, FL

Parkersburg–Marietta, WV–OH MSA

Washington County, OH
Wood County, WV

Pensacola, FL MSA

Escambia County, FL
Santa Rosa County, FL

Peoria–Pekin, IL MSA

Peoria County, IL
Tazewell County, IL
Woodford County, IL

Philadelphia, PA–NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Atlantic–Cape May, NJ PMSA
Atlantic County, NJ
Cape May County, NJ

Philadelphia, PA–NJ PMSA

Burlington County, NJ
Camden County, NJ
Gloucester County, NJ
Salem County, NJ
Bucks County, PA
Chester County, PA
Delaware County, PA
Montgomery County, PA

Philadelphia County, PA
Vineland–Millville–Bridgeton, NJ PMSA
Cumberland County, NJ

Wilmington–Newark, DE–MD PMSA
New Castle County, DE
Cecil County, MD

Phoenix–Mesa, AZ MSA

Maricopa County, AZ
Pinal County, AZ

Pine Bluff, AR MSA

Jefferson County, AR

Pittsburgh, PA MSA

Allegheny County, PA
Beaver County, PA
Butler County, PA
Fayette County, PA
Washington County, PA
Westmoreland County, PA

Pittsfield, MA MSA

Berkshire County, MA (part)
Adams town, MA
Cheshire town, MA
Dalton town, MA
Hinsdale town, MA
Lanesborough town, MA
Lee town, MA
Lenox town, MA
Pittsfield city, MA
Richmond town, MA
Stockbridge town, MA

Portland, ME MSA

Cumberland County, ME (part)
Cape Elizabeth town, ME
Casco town, ME
Cumberland town, ME
Falmouth town, ME
Freeport town, ME
Gorham town, ME
Gray town, ME
North Yarmouth town, ME
Portland city, ME
Raymond town, ME
Scarborough town, ME
South Portland city, ME
Standish town, ME
Westbrook city, ME
Windham town, ME
Yarmouth town, ME

York County, ME (part)
Buxton town, ME
Hollis town, ME
Limington town, ME
Old Orchard Beach town, ME

Portland–Vancouver, OR–WA PMSA—see Portland–Salem, OR–WA CMSA

Portland–Salem, OR–WA CMSA

Portland–Vancouver, OR–WA PMSA

Clackamas County, OR
Columbia County, OR
Multnomah County, OR
Washington County, OR
Yamhill County, OR
Clark County, WA

Salem, OR PMSA

Marion County, OR
Polk County, OR

Portsmouth–Rochester, NH–ME PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Providence–Fall River–Warwick, RI–MA MSA

Bristol County, MA (part)
Attleboro city, MA
Fall River city, MA
North Attleborough town, MA
Rehoboth town, MA
Seekonk town, MA
Somerset town, MA
Swansea town, MA
Westport town, MA
Bristol County, RI
Barrington town, RI
Bristol town, RI
Warren town, RI
Kent County, RI
Coventry town, RI
East Greenwich town, RI
Warwick city, RI
West Greenwich town, RI
West Warwick town, RI
Newport County, RI (part)
Jamestown town, RI
Little Compton town, RI
Tiverton town, RI

Providence County, RI
Burrillville town, RI
Central Falls city, RI
Cranston city, RI
Cumberland town, RI
East Providence city, RI
Foster town, RI
Glocester town, RI
Johnston town, RI
Lincoln town, RI
North Providence town, RI
North Smithfield town, RI
Pawtucket city, RI
Providence city, RI
Scituate town, RI
Smithfield town, RI
Woonsocket city, RI
Washington County, RI (part)
Charlestown town, RI
Exeter town, RI
Narragansett town, RI
North Kingstown town, RI
Richmond town, RI
South Kingstown town, RI

Provo–Orem, UT MSA

Utah County, UT

Pueblo, CO MSA

Pueblo County, CO

Punta Gorda, FL MSA

Charlotte County, FL

Racine, WI PMSA—see Milwaukee–Racine, WI CMSA

Raleigh–Durham–Chapel Hill, NC MSA

Chatham County, NC
Durham County, NC
Franklin County, NC
Johnston County, NC
Orange County, NC
Wake County, NC

Rapid City, SD MSA

Pennington County, SD

Reading, PA MSA

Berks County, PA

Redding, CA MSA

Shasta County, CA

Reno, NV MSA

Washoe County, NV

Richland–Kennewick–Pasco, WA MSA

Benton County, WA
Franklin County, WA

Richmond–Petersburg, VA MSA

Charles City County, VA
Chesterfield County, VA
Dinwiddie County, VA
Goochland County, VA
Hanover County, VA
Henrico County, VA
New Kent County, VA
Powhatan County, VA
Prince George County, VA
Colonial Heights city, VA
Hopewell city, VA
Petersburg city, VA
Richmond city, VA

Riverside–San Bernardino, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Roanoke, VA MSA

Botetourt County, VA
Roanoke County, VA
Roanoke city, VA
Salem city, VA

Rochester, MN MSA

Olmsted County, MN

Rochester, NY MSA

Genesee County, NY
Livingston County, NY
Monroe County, NY
Ontario County, NY
Orleans County, NY
Wayne County, NY

Rockford, IL MSA

Boone County, IL
Ogle County, IL
Winnebago County, IL

Rocky Mount, NC MSA

Edgecombe County, NC
Nash County, NC

Sacramento, CA PMSA—see Sacramento–Yolo, CA CMSA

Sacramento–Yolo, CA CMSA

Sacramento, CA PMSA
El Dorado County, CA
Placer County, CA
Sacramento County, CA
Yolo, CA PMSA
Yolo County, CA

Saginaw–Bay City–Midland, MI MSA

Bay County, MI
Midland County, MI
Saginaw County, MI

St. Cloud, MN MSA

Benton County, MN
Stearns County, MN

St. Joseph, MO MSA

Andrew County, MO
Buchanan County, MO

St. Louis, MO–IL MSA

Clinton County, IL
Jersey County, IL
Madison County, IL
Monroe County, IL
St. Clair County, IL
Franklin County, MO
Jefferson County, MO
Lincoln County, MO
St. Charles County, MO
St. Louis County, MO
Warren County, MO
St. Louis city, MO

Salem, OR PMSA—see Portland–Salem, OR–WA CMSA

Salinas, CA MSA

Monterey County, CA

Salt Lake City–Ogden, UT MSA

Davis County, UT
Salt Lake County, UT
Weber County, UT

San Angelo, TX MSA

Tom Green County, TX

San Antonio, TX MSA

Bexar County, TX
Comal County, TX
Guadalupe County, TX
Wilson County, TX

San Diego, CA MSA

San Diego County, CA

San Francisco, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

San Francisco–Oakland–San Jose, CA CMSA

Oakland, CA PMSA
Alameda County, CA
Contra Costa County, CA
San Francisco, CA PMSA
Marin County, CA
San Francisco County, CA
San Mateo County, CA
San Jose, CA PMSA
Santa Clara County, CA
Santa Cruz–Watsonville, CA PMSA
Santa Cruz County, CA
Santa Rosa, CA PMSA
Sonoma County, CA
Vallejo–Fairfield–Napa, CA PMSA
Napa County, CA
Solano County, CA

San Jose, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

San Luis Obispo–Atascadero–Paso Robles, CA MSA

San Luis Obispo County, CA

Santa Barbara–Santa Maria–Lompoc, CA MSA

Santa Barbara County, CA

Santa Cruz–Watsonville, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Santa Fe, NM MSA

Los Alamos County, NM
Santa Fe County, NM

Santa Rosa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Sarasota–Bradenton, FL MSA

Manatee County, FL
Sarasota County, FL

Savannah, GA MSA

Bryan County, GA
Chatham County, GA
Effingham County, GA

Scranton–Wilkes-Barre–Hazleton, PA MSA

Columbia County, PA
Lackawanna County, PA
Luzerne County, PA
Wyoming County, PA

Seattle–Bellevue–Everett, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Seattle–Tacoma–Bremerton, WA CMSA

Bremerton, WA PMSA
Kitsap County, WA
Olympia, WA PMSA
Thurston County, WA
Seattle–Bellevue–Everett, WA PMSA
Island County, WA
King County, WA
Snohomish County, WA
Tacoma, WA PMSA
Pierce County, WA

Sharon, PA MSA

Mercer County, PA

Sheboygan, WI MSA

Sheboygan County, WI

Sherman–Denison, TX MSA

Grayson County, TX

Shreveport–Bossier City, LA MSA

Bossier Parish, LA
Caddo Parish, LA
Webster Parish, LA

Sioux City, IA–NE MSA

Woodbury County, IA
Dakota County, NE

Sioux Falls, SD MSA

Lincoln County, SD
Minnehaha County, SD

South Bend, IN MSA

St. Joseph County, IN

Spokane, WA MSA

Spokane County, WA

Springfield, IL MSA

Menard County, IL
Sangamon County, IL

Springfield, MO MSA

Christian County, MO
Greene County, MO
Webster County, MO

Springfield, MA MSA

Franklin County, MA (part)
Sunderland town, MA
Hampden County, MA (part)
Agawam city, MA
Chicopee city, MA

Springfield, MA MSA—Con.

Hampden County, MA (part)—Con.
 East Longmeadow town, MA
 Hampden town, MA
 Holyoke city, MA
 Longmeadow town, MA
 Ludlow town, MA
 Monson town, MA
 Montgomery town, MA
 Palmer town, MA
 Russell town, MA
 Southwick town, MA
 Springfield city, MA
 Westfield city, MA
 West Springfield town, MA
 Wilbraham town, MA
 Hampshire County, MA (part)
 Amherst town, MA
 Belchertown town, MA
 Easthampton town, MA
 Granby town, MA
 Hadley town, MA
 Hatfield town, MA
 Huntington town, MA
 Northampton city, MA
 Southampton town, MA
 South Hadley town, MA
 Ware town, MA
 Williamsburg town, MA

Stamford–Norwalk, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**State College, PA MSA**
Centre County, PA**Steubenville–Weirton, OH–WV MSA**

Jefferson County, OH
 Brooke County, WV
 Hancock County, WV

Stockton–Lodi, CA MSA
San Joaquin County, CA**Sumter, SC MSA**
Sumter County, SC**Syracuse, NY MSA**
Cayuga County, NY
Madison County, NY
Onondaga County, NY
Oswego County, NY**Tacoma, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA****Tallahassee, FL MSA**
Gadsden County, FL
Leon County, FL**Tampa–St. Petersburg–Clearwater, FL MSA**
Hernando County, FL
Hillsborough County, FL
Pasco County, FL
Pinellas County, FL**Terre Haute, IN MSA**
Clay County, IN
Vermillion County, IN
Vigo County, IN**Texarkana, TX–Texarkana, AR MSA**
Miller County, AR
Bowie County, TX**Toledo, OH MSA**

Fulton County, OH
 Lucas County, OH
 Wood County, OH

Topeka, KS MSA
Shawnee County, KS**Trenton, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****Tucson, AZ MSA**
Pima County, AZ**Tulsa, OK MSA**
Creek County, OK
Osage County, OK
Rogers County, OK
Tulsa County, OK
Wagoner County, OK**Tuscaloosa, AL MSA**
Tuscaloosa County, AL**Tyler, TX MSA**
Smith County, TX**Utica–Rome, NY MSA**
Herkimer County, NY
Oneida County, NY**Vallejo–Fairfield–Napa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA****Ventura, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA****Victoria, TX MSA**
Victoria County, TX**Vineland–Millville–Bridgeton, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Visalia–Tulare–Porterville, CA MSA**
Tulare County, CA**Waco, TX MSA**
McLennan County, TX**Washington, DC–MD–VA–WV PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA****Washington–Baltimore, DC–MD–VA–WV CMSA**
Baltimore, MD PMSA
Anne Arundel County, MD
Baltimore County, MD
Carroll County, MD
Harford County, MD
Howard County, MD
Queen Anne's County, MD
Baltimore city, MD
Hagerstown, MD PMSA
Washington County, MD
Washington, DC–MD–VA–WV PMSA
District of Columbia, DC
Calvert County, MD
Charles County, MD
Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA**Washington–Baltimore, DC–MD–VA–WV CMSA—Con.**

Washington, DC–MD–VA–WV PMSA—Con.
 Fauquier County, VA
 King George County, VA
 Loudoun County, VA
 Prince William County, VA
 Spotsylvania County, VA
 Stafford County, VA
 Warren County, VA
 Alexandria city, VA
 Fairfax city, VA
 Falls Church city, VA
 Fredericksburg city, VA
 Manassas city, VA
 Manassas Park city, VA
 Berkeley County, WV
 Jefferson County, WV

Waterbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Waterloo–Cedar Falls, IA MSA**
Black Hawk County, IA**Wausau, WI MSA**
Marathon County, WI**West Palm Beach–Boca Raton, FL MSA**
Palm Beach County, FL**Wheeling, WV–OH MSA**
Belmont County, OH
Marshall County, WV
Ohio County, WV**Wichita, KS MSA**
Butler County, KS
Harvey County, KS
Sedgwick County, KS**Wichita Falls, TX MSA**
Archer County, TX
Wichita County, TX**Williamsport, PA MSA**
Lycoming County, PA**Wilmington–Newark, DE–MD PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Wilmington, NC MSA**
Brunswick County, NC
New Hanover County, NC**Worcester, MA–CT PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****Yakima, WA MSA**
Yakima County, WA**Yolo, CA PMSA—see Sacramento–Yolo, CA CMSA****York, PA MSA**
York County, PA**Youngstown–Warren, OH MSA**
Columbiana County, OH
Mahoning County, OH
Trumbull County, OH**Yuba City, CA MSA**
Sutter County, CA
Yuba County, CA**Yuma, AZ MSA**
Yuma County, AZ

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

- Printed reports [P]
- CD-ROM [C]
- Highlights online [+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through January 1996) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available March 1996 through May 1996) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available November 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

Census of Construction Industries

CC92-A-10

GEOGRAPHIC AREA SERIES

United States Summary

Establishments With
and Without Payroll



Acknowledgments

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If you have any questions concerning the statistics in this report, call 301-457-4680.

1992 Census of Construction Industries

CC92-A-10

GEOGRAPHIC AREA SERIES

United States Summary

Establishments With
and Without Payroll

Issued June 1996



U.S. Department of Commerce
Michael Kantor, Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director



**Economics and Statistics
Administration**

Everett M. Ehrlich, Under Secretary
for Economic Affairs



BUREAU OF THE CENSUS

Martha Farnsworth Riche, Director
Bryant Benton, Deputy Director

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include "C" corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For U.S.	By State	By employment size	By size class of dollar value of business done	By type, class, and location of construction ¹	By CMSA, PMSA, and MSA ²
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery and equipment	6, 7					
End of year—total	3, 6, 7	3	9	10		
End of year—buildings, machinery and equipment	6, 7					
Depreciation charges during year—buildings, machinery and equipment	6, 7					
Capital expenditures:						
Total capital expenditures	3, 6, 7	3	9	10		15
New buildings—machinery and equipment	6, 7					
Used buildings—machinery and equipment	6, 7					
Communication services, payments for	4, 5					
Employees:						
All employees—average number	1, 2, 3, 4, 5	1, 2, 3	9	10		15
Construction workers—average number	3, 4, 5, 12	3, 12				
Construction workers—quarterly	12	12				
Other employees—average number	4, 5					
Establishments:						
Number in business at end of year	16					
Number in business during year:						
All	1, 2	1, 2				
With payroll	1, 2, 3, 4, 5, 8, 12	1, 2, 3, 12	9	10		15
Without payroll	1, 2	1, 2				
Firms—number in business during year	4		9	10		
Fringe benefits—legally required and voluntary expenditures	4, 5					
Inventories	8					
Materials, components, supplies, and fuels—costs for	3, 4, 5	3	9	10		15
Ownership—private or government owned	4					
Payroll:						
First-quarter, all employees	4, 5					
Annual:						
All employees	3, 4, 5	3	9	10		15
Construction workers	3, 4, 5	3				
Other employees	4, 5					
Power, fuels, and lubricants—costs for	4, 5					
Proprietors and working partners:						
All establishments	1, 2	1, 2				
Establishments with payroll	1, 2, 4, 5	1, 2				
Establishments without payroll	1, 2	1, 2				
Ratios, selected industry	14	14				
Receipts and value:						
Dollar value of business done:						
All establishments	1, 2	1, 2				
Establishments with payroll	1, 2, 4, 5	1, 2	9	10		
Establishments without payroll	1, 2	1, 2				

See footnotes at end of table.

Statistics	For U.S.	By State	By employment size	By size class of dollar value of business done	By type, class, and location of construction ¹	By CMSA, PMSA, and MSA ²
Receipts and value:—Con.						
Value of construction work, total	3, 4, 5, 8	3	9	10	11, 13	15
For work subcontracted in from others	4, 5					
Other business receipts	4, 5					
Net value of construction work	3, 4, 5	3	9	10		15
Value added	3, 4, 5	3	9	10		15
Rental payments:						
Total	3, 4, 5	3	9	10		
For machinery and equipment	4, 5					
For buildings	4, 5					
Repairs to buildings and other structures	4, 5					
Repairs to machinery and equipment	4, 5					
Subcontract work to others, payments for	3, 4, 5	3	9	10		15

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

²CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan statistical area.



Summary of Findings

This report summarizes data previously published from the geographic division final reports covering construction establishments with payroll and limited data on construction establishments with no payroll during 1992 which were obtained from administrative records of the Federal Government. (Establishments with no payroll are, for the most part, companies owned and operated by a single person.) Each division report contains separate sections for the States within that division. Data for standard consolidated statistical areas and selected metropolitan statistical areas are also shown in this report.

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *1987 Standard Industrial Classification (SIC) Manual*.¹ The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were over 1.9 million establishments in the United States operating in the construction industries. These establishments accounted for \$582 billion in total dollar value of business done.

Most of the 1.9 million construction establishments were small. Of the total, 1.3 million were nonemployers, and over half of the employer establishments had less than 5 employees. However, the 214,207 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 80 percent of the total dollar value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$539 billion in total dollar value of business done. Of this amount, \$528 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$137 billion, leaving net value of construction work of \$391 billion. In addition, these establishments paid out \$185 billion for the cost of

materials, fuels, power, rental of equipment and buildings, and the cost of selected purchased services. Value added for 1992 was \$235 billion. (See Introduction and appendixes for explanation of terms.)

Establishments located in California had \$64.3 billion for value of construction work, 12 percent of the value of construction work of all establishments with payroll in the United States. The next largest State was Texas with \$36.7 billion, which was 7 percent followed by New York with \$30.7 billion, at 6 percent.

There were 572,851 establishments with total employment averaging 4,668,280 during the year. Total payroll for 1992 was \$118 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done, but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately, but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 1.3 million establishments with no payroll classified as construction. According to administrative records of the Federal Government, their dollar value of business done during 1992 was \$42.5 billion.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Selected Costs Per Dollar Value of Business Done**
(Percent)

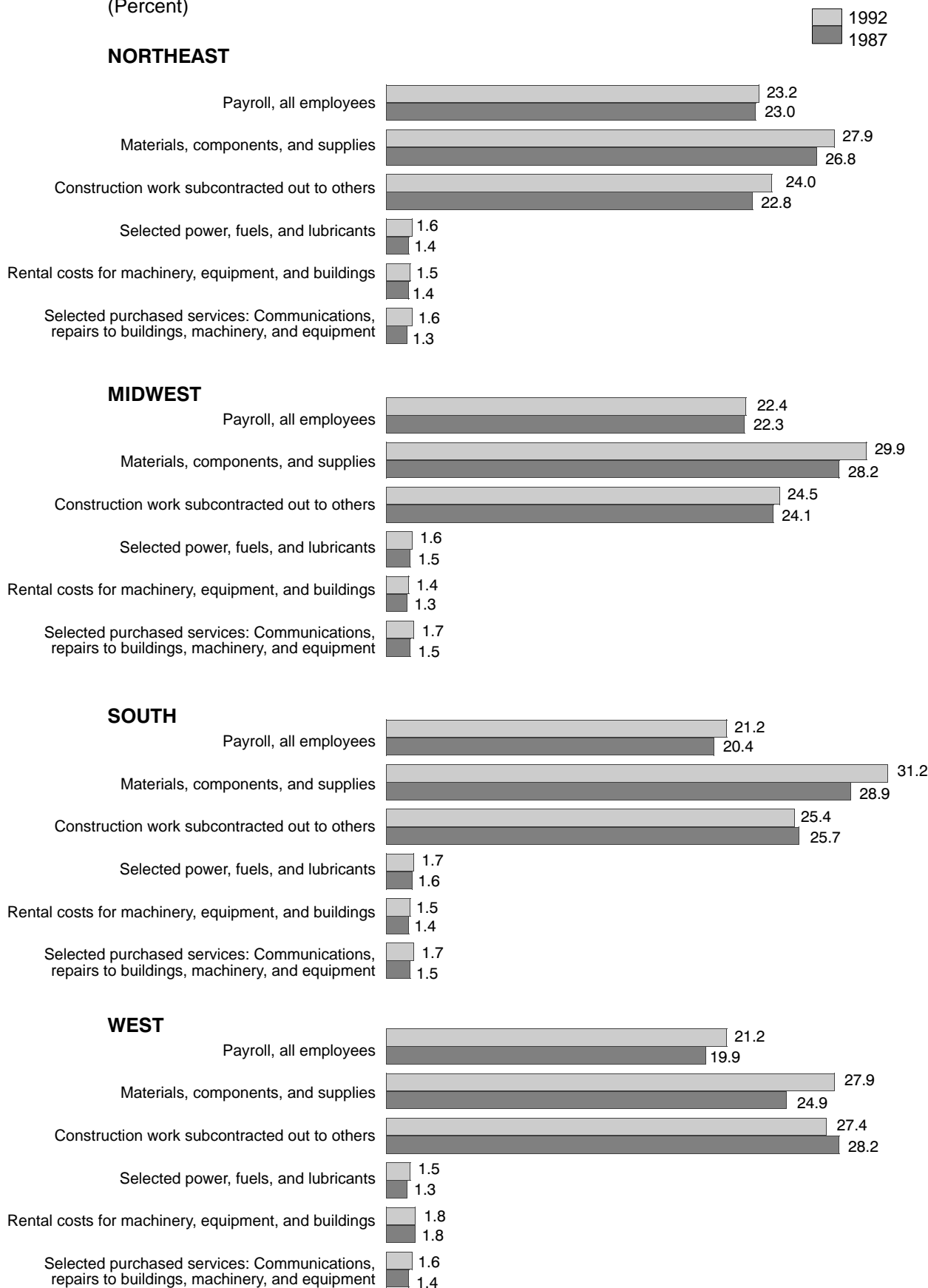


Figure 2. **Value of Construction Work by Type of Construction**
(Percent)

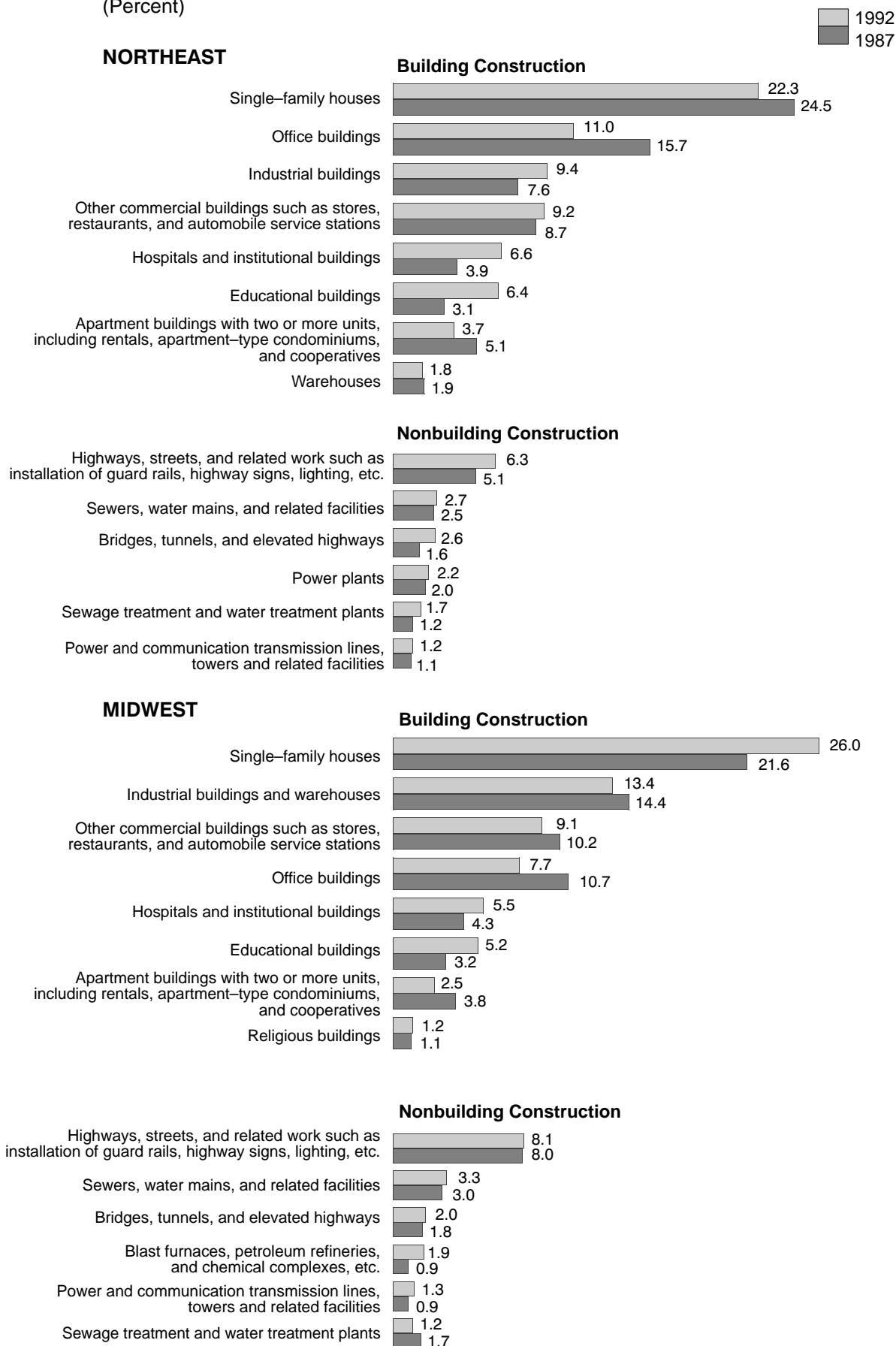


Figure 2. **Value of Construction Work by Type of Construction—Con.**
(Percent)

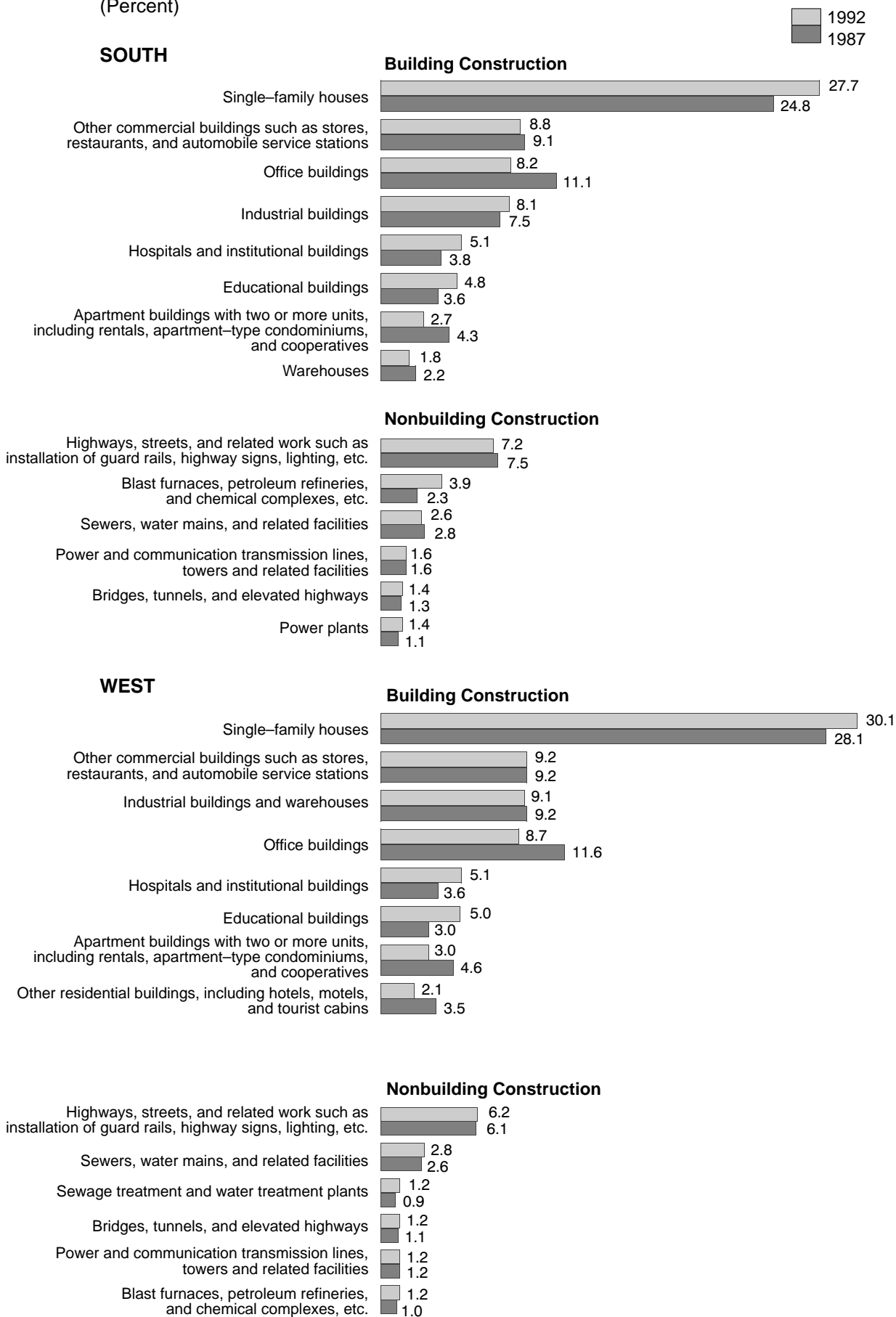


Table 1. Summary Statistics for Establishments With and Without Payroll by States: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done ¹	Number	Proprietors and working partners	All employees**	Dollar value of business done		
	A	B	C	D	E	F	G	H	I	J	K	J	K
United States -----	1 922 631	1 569 215	4 668 280	581 630 401	1 349 780	1 318 174	42 545 744	572 851	251 041	4 668 280	539 084 657	(Z)	(Z)
Alabama -----	30 823	26 635	78 254	8 267 070	23 170	22 775	640 744	7 653	3 860	78 254	7 626 326	1	1
Alaska -----	4 537	3 836	12 969	2 013 735	2 861	2 849	87 819	1 676	987	12 969	1 925 916	2	3
Arizona -----	22 568	17 137	86 749	10 929 101	14 262	13 798	456 728	8 306	3 339	86 749	10 472 373	1	1
Arkansas -----	22 046	19 595	34 057	3 840 903	17 601	17 411	479 992	4 445	2 184	34 057	3 360 911	1	1
California -----	199 084	177 747	511 115	70 167 312	134 981	135 789	4 893 428	64 103	41 958	511 115	65 273 884	(Z)	(Z)
Colorado -----	33 075	25 985	83 784	11 441 614	23 371	22 773	726 230	9 704	3 212	83 784	10 715 384	1	1
Connecticut -----	29 958	23 376	55 314	8 121 558	21 130	20 638	869 549	8 828	2 738	55 314	7 252 009	1	1
Delaware -----	5 684	3 918	17 677	1 958 307	3 613	3 327	127 596	2 071	591	17 677	1 830 711	1	2
District of Columbia -----	1 137	824	6 954	1 048 108	804	764	18 372	333	60	6 954	1 029 736	3	2
Florida -----	110 393	76 484	274 503	33 154 466	76 102	69 406	2 609 067	34 291	7 078	274 503	30 545 399	(Z)	1
Georgia -----	56 289	46 046	123 888	15 401 575	42 708	41 280	1 443 127	13 581	4 766	123 888	13 958 448	1	1
Hawaii -----	6 830	5 237	32 394	5 087 683	4 349	4 274	137 225	2 481	963	32 394	4 950 458	1	(Z)
Idaho -----	11 616	10 351	22 217	2 626 760	8 075	8 152	268 534	3 541	2 199	22 217	2 358 226	2	2
Illinois -----	77 399	59 323	211 951	28 955 646	52 820	50 998	1 679 376	24 579	8 325	211 951	27 276 270	1	1
Indiana -----	43 619	35 419	116 001	12 880 819	30 495	29 884	790 250	13 124	5 535	116 001	12 090 569	1	1
Iowa -----	23 828	20 921	49 212	5 671 797	17 121	17 139	439 179	6 707	3 782	49 212	5 232 618	1	1
Kansas -----	19 259	16 355	47 936	5 740 045	13 319	13 271	359 523	5 940	3 084	47 936	5 380 522	1	2
Kentucky -----	31 512	27 438	63 778	7 152 804	24 175	23 781	642 013	7 337	3 657	63 778	6 510 791	(Z)	1
Louisiana -----	25 532	20 306	91 852	8 199 779	19 128	18 299	523 840	6 404	2 007	91 852	7 675 226	1	1
Maine -----	15 960	13 794	21 445	2 327 515	11 967	11 869	310 176	3 993	1 925	21 445	2 017 339	2	2
Maryland -----	36 296	25 149	134 167	15 842 182	22 514	21 208	738 058	13 782	3 941	134 167	15 104 124	1	1
Massachusetts -----	55 254	44 772	86 755	12 974 785	41 807	40 696	1 425 861	13 447	4 076	86 755	11 548 924	1	1
Michigan -----	66 190	51 590	141 595	17 853 253	45 744	44 115	1 457 456	20 446	7 475	141 595	16 395 797	1	1
Minnesota -----	39 089	32 405	85 977	12 954 623	28 425	28 106	918 975	10 664	4 299	85 977	12 035 648	1	1
Mississippi -----	17 220	15 425	34 553	3 588 534	13 282	13 118	367 526	3 938	2 307	34 553	3 221 008	1	2
Missouri -----	44 045	37 112	97 064	11 804 067	31 217	30 949	768 902	12 828	6 163	97 064	11 035 165	1	1
Montana -----	9 099	8 362	13 369	1 629 698	6 538	6 605	173 542	2 561	1 757	13 369	1 456 156	2	2
Nebraska -----	13 610	11 243	30 092	3 605 219	9 286	9 236	219 400	4 324	2 007	30 092	3 385 819	1	2
Nevada -----	8 463	6 650	41 031	5 500 323	5 152	4 978	179 100	3 311	1 672	41 031	5 321 223	1	1
New Hampshire -----	15 163	13 318	17 158	2 236 230	11 844	11 735	380 154	3 319	1 583	17 158	1 856 076	1	1
New Jersey -----	56 627	39 956	131 376	18 300 743	36 984	34 329	1 451 127	19 643	5 627	131 376	16 849 616	1	1
New Mexico -----	10 468	8 628	30 888	3 009 254	6 467	6 323	184 185	4 001	2 305	30 888	2 825 069	1	2
New York -----	108 270	76 999	257 391	33 690 533	71 720	67 290	2 341 927	36 550	9 709	257 391	31 348 606	(Z)	(Z)
North Carolina -----	64 482	54 831	145 527	15 374 456	46 054	45 654	1 252 293	18 428	9 177	145 527	14 122 163	1	1
North Dakota -----	5 021	4 384	11 799	1 237 087	3 344	3 366	71 119	1 677	1 018	11 799	1 165 968	2	2
Ohio -----	81 102	67 162	190 335	24 161 161	57 750	56 881	1 601 076	23 352	10 281	190 335	22 560 085	(Z)	1
Oklahoma -----	26 367	22 995	43 687	4 833 961	20 771	20 373	556 699	5 596	2 622	43 687	4 277 262	1	1
Oregon -----	25 996	19 929	53 212	6 988 085	17 365	16 805	707 764	8 631	3 124	53 212	6 280 321	1	1
Pennsylvania -----	87 339	75 860	213 478	26 653 388	61 117	61 126	2 060 064	26 222	14 734	213 478	24 593 324	(Z)	(Z)
Rhode Island -----	8 767	6 177	13 981	2 045 908	5 901	5 510	195 953	2 866	667	13 981	1 849 955	1	1
South Carolina -----	26 699	22 028	69 688	6 836 959	18 255	17 835	531 949	8 444	4 193	69 688	6 305 010	1	1
South Dakota -----	6 238	5 679	12 836	1 351 232	4 239	4 288	95 349	1 999	1 391	12 836	1 255 883	2	3
Tennessee -----	44 135	40 479	89 768	10 675 965	34 865	34 970	1 081 683	9 270	5 509	89 768	9 594 282	1	1
Texas -----	131 394	113 813	335 521	40 539 593	102 284	100 770	2 883 824	29 110	13 043	335 521	37 655 769	(Z)	1
Utah -----	13 811	11 590	34 950	4 222 479	9 445	9 295	349 029	4 366	2 295	34 950	3 873 450	1	1
Vermont -----	8 963	7 649	11 878	1 383 462	6 419	6 324	163 646	2 544	1 325	11 878	1 219 816	2	2
Virginia -----	50 537	39 279	143 644	15 290 546	33 386	32 228	997 111	17 151	7 051	143 644	14 293 435	1	1
Washington -----	38 974	31 302	121 799	16 721 711	21 695	21 634	967 054	17 279	9 668	121 799	15 754 657	1	1
West Virginia -----	11 569	10 176	24 982	2 228 610	7 974	7 968	154 915	3 595	2 208	24 982	2 073 695	1	1
Wisconsin -----	35 757	29 704	96 781	12 108 870	23 043	23 166	708 055	12 714	6 538	96 781	11 400 815	1	1
Wyoming -----	4 533	3 843	10 948	1 000 886	2 841	2 816	59 180	1 692	1 027	10 948	941 706	2	2

Note: Number of establishments in this and subsequent tables represent those in business at any time during year.

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

Table 2. Summary Statistics for Establishments With and Without Payroll by States: 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	All establishments				Establishments without payroll ¹			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done		
	A	B	C	D	E	F	G	H	I	J	K	J	K
United States -----	1 904 598	1 482 273	5 014 598	578 421 743	1 368 322	1 343 572	63 484 147	536 276	138 701	5 014 598	514 937 596	(Z)	(Z)
Alabama -----	30 062	24 200	84 812	8 542 039	22 662	22 294	1 051 902	7 400	1 906	84 812	7 490 137	2	1
Alaska -----	5 227	4 115	12 764	1 888 839	3 720	3 720	162 292	1 507	395	12 764	1 726 547	2	2
Arizona -----	25 730	18 460	97 854	11 918 255	16 827	16 480	1 154 733	8 903	1 980	97 854	10 763 522	1	1
Arkansas -----	23 160	19 992	30 434	3 154 264	18 987	18 829	670 736	4 173	1 163	30 434	2 483 528	2	2
California -----	204 342	163 099	598 320	87 984 753	145 292	145 359	13 286 669	59 050	17 740	598 320	74 698 084	(Z)	(Z)
Colorado -----	34 989	27 719	79 961	9 810 596	26 032	25 454	1 224 130	8 957	2 265	79 961	8 586 466	1	1
Connecticut -----	34 081	25 401	89 494	12 021 367	23 326	23 014	2 111 457	10 755	2 387	89 494	9 909 910	1	1
Delaware -----	5 427	3 788	19 728	2 036 295	3 533	3 406	263 140	1 894	382	19 728	1 773 155	1	2
District of Columbia -----	1 313	885	11 222	1 520 730	904	853	122 834	409	32	11 222	1 397 896	2	2
Florida -----	112 111	79 346	329 877	37 542 961	78 173	73 727	5 322 365	33 938	5 619	329 877	32 220 596	(Z)	1
Georgia -----	60 192	48 455	149 698	18 039 517	46 291	45 125	2 970 224	13 901	3 330	149 698	15 069 293	1	1
Hawaii -----	5 796	4 310	21 706	3 233 759	3 905	3 854	270 626	1 891	456	21 706	2 963 133	1	1
Idaho -----	10 370	8 863	13 847	2 328 129	8 278	8 258	332 024	2 092	605	13 847	1 996 105	2	1
Illinois -----	71 913	54 989	209 154	26 212 664	51 341	50 420	2 918 968	20 572	4 569	209 154	23 293 696	1	1
Indiana -----	42 346	33 748	98 408	10 373 798	31 373	30 604	1 257 428	10 973	3 144	98 408	9 116 370	1	1
Iowa -----	23 699	19 889	37 825	4 013 077	18 389	18 195	582 160	5 310	1 694	37 825	3 430 917	1	1
Kansas -----	22 547	18 842	46 042	5 192 132	16 940	16 843	716 924	5 607	1 999	46 042	4 475 208	1	2
Kentucky -----	31 572	26 563	55 761	5 718 255	25 261	24 929	914 081	6 311	1 634	55 761	4 804 174	1	1
Louisiana -----	26 981	20 851	76 720	6 523 189	20 642	19 652	777 493	6 339	1 199	76 720	5 745 696	1	1
Maine -----	16 008	12 957	32 706	3 356 436	11 583	11 498	554 644	4 425	1 459	32 706	2 801 792	2	2
Maryland -----	34 694	24 028	160 612	19 578 087	22 191	21 561	2 076 023	12 503	2 467	160 612	17 502 064	1	1
Massachusetts -----	61 171	45 908	143 625	19 210 213	43 312	42 436	3 563 092	17 859	3 472	143 625	15 647 121	1	1
Michigan -----	61 599	48 072	140 085	17 255 267	44 553	43 773	2 042 889	17 046	4 299	140 085	15 212 378	1	1
Minnesota -----	40 021	32 601	83 814	11 422 980	30 337	29 865	1 404 793	9 684	2 736	83 814	10 018 187	1	1
Mississippi -----	17 342	14 419	32 450	3 153 869	13 482	13 334	520 037	3 860	1 085	32 450	2 633 842	1	2
Missouri -----	46 787	38 010	105 191	12 415 405	35 330	34 825	1 454 682	11 457	3 185	105 191	10 960 723	1	1
Montana -----	8 807	7 478	10 186	1 233 681	6 670	6 685	226 722	2 137	793	10 186	1 006 959	2	2
Nebraska -----	14 181	11 418	26 566	2 557 914	10 315	10 145	358 519	3 866	1 273	26 566	2 199 395	2	2
Nevada -----	7 496	5 459	32 961	4 022 055	4 950	4 893	340 007	2 546	566	32 961	3 682 048	1	3
New Hampshire -----	17 600	13 723	37 889	4 643 307	12 263	12 146	911 273	5 337	1 577	37 889	3 732 034	1	2
New Jersey -----	59 711	39 957	187 617	24 289 173	37 463	35 525	3 058 776	22 248	4 432	187 617	21 230 397	1	1
New Mexico -----	10 789	8 165	29 139	2 787 666	7 082	7 042	362 027	3 707	1 123	29 139	2 425 639	2	2
New York -----	104 913	71 412	326 979	38 961 146	68 036	64 942	4 289 938	36 877	6 470	326 979	34 671 208	(Z)	1
North Carolina -----	63 708	51 351	154 844	16 645 666	46 323	46 041	2 160 706	17 385	5 310	154 844	13 484 960	1	1
North Dakota -----	6 216	5 141	11 066	1 077 450	4 408	4 413	140 847	1 808	728	11 066	936 603	2	3
Ohio -----	76 142	60 797	181 669	21 119 999	55 341	54 814	2 399 380	20 801	5 983	181 669	18 720 619	1	1
Oklahoma -----	31 097	26 713	38 728	4 061 546	25 893	25 451	931 706	5 204	1 262	38 728	3 129 840	1	2
Oregon -----	21 898	16 901	38 504	4 564 219	15 429	15 285	764 384	6 469	1 616	38 504	3 799 835	1	1
Pennsylvania -----	86 344	70 268	234 314	27 392 699	61 269	61 111	3 964 077	25 075	9 157	234 314	23 428 622	(Z)	1
Rhode Island -----	9 269	6 403	20 328	2 693 125	6 094	5 895	365 595	3 175	508	20 328	2 327 530	2	2
South Carolina -----	25 455	19 216	95 354	9 815 592	17 679	17 379	1 066 463	7 776	1 837	95 354	8 749 129	1	1
South Dakota -----	6 533	5 601	9 452	936 284	4 881	4 882	173 401	1 652	719	9 452	762 883	3	2
Tennessee -----	43 724	37 854	99 216	11 264 856	34 827	34 953	1 887 050	8 897	2 901	99 216	9 377 806	1	1
Texas -----	146 954	121 332	349 578	38 068 185	114 917	114 025	5 841 061	32 037	7 307	349 578	32 227 124	(Z)	1
Utah -----	14 950	12 119	27 287	3 345 984	11 110	11 003	550 629	3 840	1 116	27 287	2 795 355	2	2
Vermont -----	8 678	6 737	16 630	1 813 246	6 039	5 935	278 253	2 639	802	16 630	1 534 993	2	4
Virginia -----	52 115	39 214	171 298	18 295 113	35 489	34 788	2 243 446	16 626	4 426	171 298	16 051 667	1	1
Washington -----	35 091	26 496	85 585	10 740 896	22 673	22 778	1 265 783	12 418	3 718	85 585	9 475 113	1	1
West Virginia -----	11 550	9 356	20 669	1 712 872	8 713	8 586	220 929	2 837	770	20 669	1 491 943	2	2
Wisconsin -----	34 069	27 094	77 419	8 701 940	23 338	23 351	952 393	10 731	3 743	77 419	7 749 547	1	1
Wyoming -----	4 716	3 775	8 952	854 485	3 410	3 396	100 937	1 306	379	8 952	753 548	2	2

Note: The 1987 United States total does not include data for "Land Subdividers and Developers," SIC 6552. The 1987 State data includes SIC 6552.

¹May include data for an unknown number of cemetery subdividers and developers.

Table 3. General Statistics for Establishments With Payroll by States: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	1992							
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
		All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H	
United States -----	572 851	4 668 280	3 596 200	117 729 651	83 048 158	528 105 847	391 189 891	234 617 817
Alabama -----	7 653	78 254	62 106	1 637 862	1 145 090	7 461 733	5 524 109	3 064 915
Alaska -----	1 676	12 969	10 180	473 335	352 775	1 876 384	1 476 131	922 167
Arizona -----	8 306	86 749	66 453	1 904 417	1 306 317	10 323 979	6 822 623	4 122 386
Arkansas -----	4 445	34 057	27 101	651 800	482 166	3 302 594	2 483 084	1 350 666
California -----	64 103	511 115	388 254	14 227 394	9 814 596	64 256 118	46 350 107	28 913 937
Colorado -----	9 704	83 784	65 441	2 045 952	1 475 890	10 554 643	7 414 061	4 323 209
Connecticut -----	8 828	55 314	41 211	1 679 071	1 139 678	7 142 704	5 351 737	3 399 181
Delaware -----	2 071	17 677	13 680	445 084	313 479	1 798 873	1 365 509	839 169
District of Columbia -----	333	6 954	5 212	215 031	141 583	1 018 172	558 322	350 594
Florida -----	34 291	274 503	203 988	5 709 605	3 744 663	30 032 845	21 604 733	12 025 405
Georgia -----	13 581	123 888	95 113	2 712 171	1 860 397	13 761 145	9 840 063	5 372 566
Hawaii -----	2 481	32 394	24 651	1 112 471	780 394	4 833 246	3 551 632	2 148 283
Idaho -----	3 541	22 217	17 252	479 350	343 681	2 261 464	1 709 621	1 014 179
Illinois -----	24 579	211 951	161 927	6 492 735	4 648 497	26 738 481	19 913 253	12 631 107
Indiana -----	13 124	116 001	90 667	2 939 817	2 156 197	11 888 023	9 428 757	5 582 888
Iowa -----	6 707	49 212	39 249	1 115 416	831 732	5 090 157	3 913 932	2 253 520
Kansas -----	5 940	47 936	37 687	1 083 919	777 922	5 255 201	3 943 754	2 231 420
Kentucky -----	7 337	63 778	50 354	1 363 834	982 150	6 359 330	4 784 223	2 682 035
Louisiana -----	6 404	91 852	75 352	2 106 170	1 608 648	7 544 546	6 298 427	3 804 749
Maine -----	3 993	21 445	16 585	453 040	334 492	1 949 900	1 571 233	979 122
Maryland -----	13 782	134 167	102 371	3 436 910	2 318 702	14 650 489	10 522 861	6 472 251
Massachusetts -----	13 447	86 755	64 329	2 508 784	1 705 809	11 383 768	8 249 178	5 073 767
Michigan -----	20 446	141 595	107 740	3 666 125	2 600 447	16 048 438	12 018 699	7 109 697
Minnesota -----	10 664	85 977	66 389	2 453 914	1 770 908	11 747 155	8 249 248	5 133 010
Mississippi -----	3 938	34 553	27 763	649 627	468 930	3 153 995	2 444 000	1 319 709
Missouri -----	12 828	97 064	75 777	2 402 222	1 758 121	10 764 435	7 956 207	4 773 150
Montana -----	2 561	13 369	10 600	294 240	218 647	1 415 411	1 089 188	608 848
Nebraska -----	4 324	30 092	23 444	650 066	471 512	3 314 534	2 575 274	1 427 450
Nevada -----	3 311	41 031	31 415	1 165 636	825 639	5 202 052	3 739 037	2 330 203
New Hampshire -----	3 319	17 158	12 885	412 461	287 567	1 772 094	1 368 654	814 793
New Jersey -----	19 643	131 376	99 149	4 009 157	2 799 092	16 492 684	12 951 750	8 401 275
New Mexico -----	4 001	30 888	24 969	609 996	442 039	2 789 755	2 150 479	1 312 024
New York -----	36 550	257 391	193 972	7 572 256	5 308 972	30 716 613	23 250 658	14 768 059
North Carolina -----	18 428	145 527	113 374	2 975 840	2 071 720	13 851 639	10 456 584	5 786 198
North Dakota -----	1 677	11 799	9 734	251 581	195 768	1 144 246	917 069	534 253
Ohio -----	23 352	190 335	144 844	4 967 288	3 503 473	22 014 084	16 263 672	9 436 350
Oklahoma -----	5 596	43 687	34 294	933 174	674 857	4 215 793	3 220 952	1 875 399
Oregon -----	8 631	53 212	40 854	1 354 875	982 628	6 141 153	4 538 490	2 720 742
Pennsylvania -----	26 222	213 478	165 712	5 620 793	4 076 840	24 007 544	18 000 782	11 183 225
Rhode Island -----	2 866	13 981	10 587	359 207	255 114	1 808 866	1 258 332	766 729
South Carolina -----	8 444	69 688	53 984	1 414 933	1 017 277	6 217 724	4 632 778	2 537 367
South Dakota -----	1 999	12 836	10 294	253 483	188 056	1 233 892	976 794	561 172
Tennessee -----	9 270	89 768	70 234	1 965 588	1 370 722	9 470 394	6 704 111	3 632 375
Texas -----	29 110	335 521	261 195	8 012 865	5 605 753	36 731 358	27 465 448	16 444 347
Utah -----	4 366	34 950	27 708	775 340	581 218	3 774 719	2 691 420	1 592 868
Vermont -----	2 544	11 878	9 186	241 116	175 366	1 196 993	863 228	495 560
Virginia -----	17 151	143 644	111 868	3 160 154	2 183 285	14 033 074	10 495 150	6 110 086
Washington -----	17 279	121 799	94 066	3 351 695	2 396 511	15 370 231	11 285 723	6 745 006
West Virginia -----	3 595	24 982	20 244	541 649	411 521	1 998 433	1 715 113	1 093 773
Wisconsin -----	12 714	96 781	75 745	2 634 937	1 957 373	11 078 769	8 491 178	5 096 395
Wyoming -----	1 692	10 948	9 012	235 264	183 942	915 974	742 521	450 239

Note: The 1987 United States total does not include data for "Land Subdividers and Developers," SIC 6552. The 1987 State data includes SIC 6552.

1992—Con.						1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
167 550 884	136 915 956	142 608 034	8 364 021	7 902 110	76 099 045	5 014 598	495 346 312	227 934 191	(Z)	(Z)	1	US
2 623 787	1 937 625	1 768 171	103 826	115 313	1 067 891	84 812	7 261 360	2 946 167	1	1	5	AL
603 496	400 253	536 997	44 084	60 955	465 366	12 764	1 680 844	932 139	2	2	4	AK
2 848 631	3 501 356	3 104 673	161 474	123 711	998 778	97 854	9 973 925	4 213 191	1	1	3	AZ
1 190 735	819 511	781 281	53 423	76 659	649 133	30 434	2 400 570	1 032 258	1	1	7	AR
18 453 936	17 906 010	20 642 834	1 255 817	651 010	7 039 070	598 320	71 177 525	32 876 569	(Z)	(Z)	2	CA
3 251 593	3 140 582	3 038 884	164 655	188 740	1 232 264	79 961	8 276 694	3 506 543	1	1	4	CO
2 061 862	1 790 966	1 776 097	120 358	83 466	1 109 947	89 494	9 549 266	4 793 254	1	1	5	CT
558 178	433 363	452 856	37 100	27 505	307 441	19 728	1 697 841	790 909	1	1	5	DE
219 292	459 850	190 626	13 730	5 461	80 658	11 222	1 351 297	500 280	3	2	3	DC
10 091 882	8 428 112	7 818 648	440 839	394 569	3 684 470	329 877	30 391 051	12 538 541	(Z)	1	2	FL
4 664 801	3 921 082	3 275 086	189 150	185 957	1 798 389	149 698	14 405 566	5 963 428	1	1	4	GA
1 520 561	1 281 614	1 337 082	81 560	69 589	629 436	21 706	2 849 780	1 288 730	1	1	4	HI
792 204	551 842	587 742	33 937	54 465	413 638	13 847	1 723 338	585 196	2	2	6	ID
7 819 936	6 825 228	7 811 901	403 411	409 781	3 857 656	209 154	22 575 712	10 927 571	1	1	2	IL
4 048 415	2 459 265	3 058 713	162 072	215 371	1 738 867	98 408	8 799 822	4 205 974	1	1	4	IN
1 802 873	1 176 225	1 194 928	59 396	115 200	1 023 397	37 825	3 341 668	1 468 040	1	1	5	IA
1 837 656	1 311 447	1 226 873	81 892	114 434	941 220	46 042	4 291 125	1 958 207	1	2	4	KS
2 253 649	1 575 107	1 601 057	91 551	129 725	1 043 879	55 761	4 603 454	2 060 016	(Z)	1	4	KY
2 625 071	1 246 119	1 607 322	175 553	135 194	1 502 724	76 720	5 598 712	2 826 778	1	1	5	LA
659 550	378 667	428 976	33 824	47 760	549 794	32 706	2 701 081	1 374 526	2	2	5	ME
4 504 245	4 127 628	4 271 256	199 418	152 894	1 946 712	160 612	16 523 797	7 694 849	1	1	4	MD
3 340 568	3 134 589	3 186 392	161 115	125 187	1 502 862	143 625	15 082 398	7 056 735	1	1	3	MA
5 256 361	4 029 739	4 655 280	238 464	274 924	2 558 404	140 085	14 654 738	6 915 232	1	1	3	MI
3 404 731	3 497 907	3 072 213	177 327	209 415	1 794 389	83 814	9 702 867	4 349 314	1	1	3	MN
1 191 304	709 995	732 843	51 778	57 114	550 470	32 450	2 557 272	1 109 665	1	2	5	MS
3 453 787	2 808 228	2 966 895	136 306	194 051	1 678 965	105 191	10 501 073	4 867 062	1	1	3	MO
521 084	326 224	343 525	24 715	50 815	311 246	10 186	975 525	507 705	2	2	6	MT
1 219 109	739 261	836 103	43 488	67 544	581 505	26 566	2 137 566	952 428	1	1	5	NE
1 528 006	1 463 015	1 768 434	90 897	95 424	1 357 406	32 961	3 542 235	1 648 169	1	1	3	NV
637 843	403 440	526 999	31 296	29 122	367 591	37 889	3 547 066	1 608 817	1	1	5	NH
4 907 406	3 540 934	4 407 998	254 758	187 672	2 188 132	187 617	20 064 340	10 165 521	1	1	3	NJ
873 768	639 276	749 421	44 789	58 489	495 259	29 139	2 347 300	1 071 100	1	1	7	NM
9 114 592	7 465 955	8 097 102	442 685	324 994	3 758 837	326 979	33 594 491	17 131 349	(Z)	(Z)	2	NY
4 940 910	3 395 055	3 515 529	185 467	253 014	2 544 345	154 844	12 928 252	5 364 564	1	1	3	NC
404 539	227 176	230 155	24 260	28 548	264 841	11 066	901 567	412 270	2	2	7	ND
7 373 324	5 750 412	5 617 103	309 379	339 009	3 004 919	181 669	18 095 164	8 287 663	(Z)	1	2	OH
1 407 022	994 841	1 035 484	77 283	81 453	685 706	38 728	3 030 883	1 421 363	1	1	4	OK
1 956 915	1 602 663	1 843 564	125 228	101 984	777 533	38 504	3 675 649	1 739 743	1	1	6	OR
7 403 337	6 006 762	6 064 622	370 958	337 971	3 703 576	234 314	22 632 570	11 065 791	(Z)	(Z)	2	PA
532 692	550 534	421 959	26 508	20 166	231 347	20 328	2 271 298	952 879	1	2	12	RI
2 182 697	1 584 946	1 644 893	86 122	103 110	988 460	95 354	7 870 379	3 787 970	1	1	5	SC
437 613	257 097	307 339	18 930	35 256	272 022	9 452	724 664	352 553	2	2	9	SD
3 195 624	2 766 283	2 293 286	125 265	169 126	1 469 507	99 216	9 058 512	3 743 920	1	1	3	TN
11 945 512	9 265 910	8 533 291	666 131	549 908	5 230 903	349 578	30 712 341	13 767 035	(Z)	1	3	TX
1 197 283	1 083 299	1 157 015	63 675	87 670	610 777	27 287	2 698 609	1 181 307	1	1	5	UT
390 491	333 765	192 294	18 173	19 644	236 679	16 630	1 479 576	634 232	2	2	13	VT
4 645 426	3 537 923	3 984 035	200 477	186 642	2 320 362	171 298	15 218 417	6 624 200	1	1	3	VA
4 925 143	4 084 508	4 261 704	241 731	232 457	1 831 649	85 585	9 149 222	4 197 508	1	1	3	WA
696 603	283 320	407 509	36 630	48 532	465 601	20 669	1 440 174	825 347	1	1	6	WV
3 716 829	2 587 592	3 049 072	158 775	244 139	1 979 103	77 419	7 481 951	3 605 139	1	1	3	WI
318 013	173 454	193 974	24 341	30 970	255 917	8 952	731 687	344 334	2	2	10	WY

Table 4. Detailed Statistics for Establishments With Payroll by Geographic Area: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms and States included in census geographic regions, see appendixes]

Item	Establishments located in the—					Relative standard error of estimate (percent) for column—				
	United States	Northeast	Midwest	South	West					
	A	B	C	D	E	A	B	C	D	E
Number of establishments in business during year -----	572 851	117 413	138 355	185 431	131 653	(Z)	(Z)	(Z)	(Z)	(Z)
Proprietors and working partners -----	251 041	42 383	59 898	74 254	74 505	(Z)	1	1	1	(Z)
All employees** -----	4 668 280	808 776	1 091 578	1 712 500	1 055 427	(Z)	(Z)	(Z)	(Z)	(Z)
Construction workers:										
March -----	3 279 642	536 169	717 770	1 264 441	761 262	(Z)	(Z)	(Z)	(Z)	(Z)
May -----	3 650 182	623 285	866 423	1 341 164	819 310	(Z)	(Z)	(Z)	(Z)	(Z)
August -----	3 872 139	675 712	943 828	1 385 077	867 523	(Z)	(Z)	(Z)	(Z)	(Z)
November -----	3 582 836	619 297	845 966	1 322 249	795 325	(Z)	(Z)	(Z)	(Z)	(Z)
Average -----	3 596 200	613 616	843 497	1 328 233	810 855	(Z)	(Z)	(Z)	(Z)	(Z)
Other employees:										
March -----	1 075 709	195 980	245 586	387 370	246 772	(Z)	(Z)	(Z)	(Z)	(Z)
May -----	1 065 118	194 063	247 606	380 826	242 624	(Z)	(Z)	(Z)	(Z)	(Z)
August -----	1 073 431	194 509	250 255	382 854	245 813	(Z)	(Z)	(Z)	(Z)	(Z)
November -----	1 074 063	196 089	248 879	386 018	243 078	(Z)	(Z)	(Z)	(Z)	(Z)
Average -----	1 072 080	195 160	248 081	384 267	244 572	(Z)	(Z)	(Z)	(Z)	(Z)
Payroll, all employees -----	117 729 651	22 855 885	28 911 503	37 932 299	28 029 964	(Z)	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers -----	83 048 158	16 082 931	20 860 006	26 400 943	19 704 278	(Z)	(Z)	(Z)	(Z)	(Z)
Payroll, other employees -----	34 681 493	6 772 954	8 051 497	11 531 356	8 325 686	(Z)	(Z)	(Z)	(Z)	(Z)
First-quarter payroll, all employees -----	25 769 714	4 914 666	5 953 025	8 606 061	6 295 962	(Z)	(Z)	(Z)	(Z)	(Z)
Fringe benefits, all employees -----	29 397 159	6 330 959	7 827 791	7 946 978	7 291 430	(Z)	(Z)	(Z)	(Z)	(Z)
Legally required expenditures -----	19 095 920	3 839 477	4 773 101	5 743 663	4 739 678	(Z)	(Z)	(Z)	(Z)	(Z)
Voluntary expenditures -----	10 301 239	2 491 482	3 054 690	2 203 315	2 551 752	(Z)	(Z)	(Z)	(Z)	(Z)
Dollar value of business done -----	539 084 657	98 535 666	129 215 161	179 185 010	132 148 821	(Z)	(Z)	(Z)	(Z)	(Z)
Value of construction work -----	528 105 847	96 471 165	126 317 414	175 602 138	129 715 129	(Z)	(Z)	(Z)	(Z)	(Z)
Value of construction work subcontracted in from others -----	142 608 034	25 102 438	34 026 575	43 913 172	39 565 850	(Z)	1	1	1	1
Other business -----	10 978 810	2 064 500	2 897 746	3 582 872	2 433 692	1	1	1	1	1
Net value of construction work† -----	391 189 891	72 865 551	94 647 838	130 115 468	93 561 034	(Z)	(Z)	(Z)	(Z)	(Z)
Value added†† -----	234 617 817	45 881 710	56 770 412	74 761 603	57 204 092	(Z)	(Z)	(Z)	(Z)	(Z)
Selected costs -----	304 466 840	52 653 955	72 444 749	104 423 407	74 944 729	(Z)	(Z)	(Z)	(Z)	(Z)
Materials, components, and supplies -----	158 859 963	27 500 103	38 659 869	55 844 828	36 855 163	(Z)	(Z)	(Z)	(Z)	(Z)
Construction work subcontracted to others -----	136 915 956	23 605 614	31 669 577	45 486 670	36 154 096	(Z)	1	(Z)	(Z)	(Z)
Selected power, fuels, and lubricants -----	8 690 921	1 548 239	2 115 303	3 091 909	1 935 471	(Z)	(Z)	(Z)	(Z)	(Z)
Electricity -----	1 469 035	294 495	336 768	512 123	325 649	(Z)	1	1	1	1
Natural and manufactured gas -----	464 155	74 100	150 005	147 197	92 853	(Z)	1	1	1	1
Gasoline and diesel fuel -----	6 240 812	1 080 942	1 502 356	2 246 614	1 410 899	(Z)	1	(Z)	(Z)	(Z)
On highway use -----	4 479 896	810 786	1 045 479	1 579 789	1 043 842	(Z)	1	1	(Z)	1
Off highway use -----	1 760 915	270 156	456 877	666 826	367 057	(Z)	1	1	1	1
Other, including lubricating oils and greases -----	516 919	98 701	126 174	185 975	106 069	1	1	1	1	1
Rental cost for machinery, equipment, and buildings -----	8 364 021	1 459 676	1 813 700	2 733 742	2 356 903	(Z)	1	1	1	1
For machinery and equipment -----	5 617 243	890 571	1 205 230	1 941 748	1 579 695	(Z)	1	1	1	1
For buildings -----	2 746 777	569 104	608 471	791 994	777 208	(Z)	1	1	1	1
Selected purchased services -----	9 050 015	1 560 462	2 253 864	3 091 078	2 144 611	(Z)	1	1	1	1
Communication services -----	2 741 739	524 838	616 463	927 559	672 879	1	1	1	1	1
Repairs to buildings and other structures -----	496 632	95 970	126 220	163 040	111 402	1	2	3	2	2
Repairs to machinery and equipment -----	5 811 644	939 655	1 511 181	2 000 478	1 360 330	(Z)	1	1	1	1
Ownership of construction projects:										
Value of construction work -----	528 105 847	96 471 165	126 317 414	175 602 138	129 715 129	(Z)	(Z)	(Z)	(Z)	(Z)
Government owned -----	133 767 207	25 751 526	31 607 590	42 916 344	33 491 747	(Z)	1	1	1	1
Federal -----	30 243 555	4 043 477	5 824 536	12 052 161	8 323 381	1	1	1	1	1
State and local -----	103 523 652	21 708 049	25 783 054	30 864 183	25 168 366	(Z)	1	1	1	1
Privately owned -----	394 338 640	70 719 639	94 709 825	132 685 794	96 223 382	(Z)	(Z)	(Z)	(Z)	(Z)

Table 5. Detailed Statistics for Establishments With Payroll by Geographic Area: 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms and States included in census geographic regions, see appendixes]

Item	United States	Establishments located in the—				Relative standard error of estimate (percent) for column—				
		Northeast	Midwest	South	West	A	B	C	D	E
	A	B	C	D	E					
Number of establishments in business during year	536 276	128 394	119 513	181 495	114 829	(Z)	(Z)	(Z)	(Z)	(Z)
Proprietors and working partners	138 701	30 266	34 076	42 636	32 757	(Z)	1	1	1	1
All employees**	5 014 598	1 089 585	1 026 699	1 881 009	1 057 073	(Z)	(Z)	(Z)	(Z)	(Z)
Construction workers:										
March	3 641 188	761 480	691 663	1 429 907	766 783	(Z)	(Z)	(Z)	(Z)	(Z)
May	4 013 101	874 276	825 822	1 501 340	821 297	(Z)	(Z)	(Z)	(Z)	(Z)
August	4 272 270	938 199	906 050	1 562 023	876 173	(Z)	(Z)	(Z)	(Z)	(Z)
November	3 990 976	872 789	828 224	1 476 733	822 041	(Z)	(Z)	(Z)	(Z)	(Z)
Average	3 979 385	861 686	812 940	1 492 501	821 573	(Z)	(Z)	(Z)	(Z)	(Z)
Other employees:										
March	1 020 820	222 237	207 781	388 754	232 250	(Z)	(Z)	(Z)	(Z)	(Z)
May	1 029 151	226 610	212 941	384 999	234 497	(Z)	(Z)	(Z)	(Z)	(Z)
August	1 049 248	231 875	218 212	391 441	239 184	(Z)	(Z)	(Z)	(Z)	(Z)
November	1 042 012	230 977	216 178	388 979	236 120	(Z)	(Z)	(Z)	(Z)	(Z)
Average	1 035 308	227 925	213 778	388 543	235 513	(Z)	(Z)	(Z)	(Z)	(Z)
Payroll, all employees	110 199 890	26 476 775	23 881 134	35 916 743	24 792 664	(Z)	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	79 588 691	19 015 782	17 602 576	25 501 035	17 622 267	(Z)	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	30 611 196	7 460 993	6 278 558	10 415 707	7 170 397	(Z)	(Z)	(Z)	(Z)	(Z)
First-quarter payroll, all employees	24 166 639	5 612 332	5 007 275	8 204 370	5 544 500	(Z)	(Z)	(Z)	(Z)	(Z)
Fringe benefits, all employees	24 793 259	6 299 996	5 746 408	6 893 695	5 996 540	(Z)	(Z)	(Z)	(Z)	(Z)
Legally required expenditures	16 908 658	4 240 824	3 691 552	5 031 416	4 051 402	(Z)	(Z)	(Z)	(Z)	(Z)
Voluntary expenditures	7 884 599	2 059 171	2 054 856	1 862 279	1 945 137	(Z)	(Z)	(Z)	(Z)	(Z)
Dollar value of business done	514 937 596	115 283 611	106 876 531	175 632 859	124 672 360	(Z)	(Z)	(Z)	(Z)	(Z)
Value of construction work	495 346 312	110 922 090	103 207 922	167 049 883	118 802 337	(Z)	(Z)	(Z)	(Z)	(Z)
Value of construction work subcontracted in from others	118 720 566	26 083 852	24 341 743	37 358 711	31 020 711	(Z)	1	1	1	1
Other business receipts	19 591 285	2 640 676	2 643 084	4 548 412	3 141 662	1	1	1	1	1
Net value of construction work	365 240 579	84 677 691	77 444 096	121 978 438	83 645 507	(Z)	(Z)	(Z)	(Z)	(Z)
Value added††	227 934 191	54 783 108	48 301 458	72 997 296	54 092 240	(Z)	(Z)	(Z)	(Z)	(Z)
Selected costs	279 977 099	58 779 658	57 549 548	98 601 004	67 851 754	(Z)	(Z)	(Z)	(Z)	(Z)
Materials, components, and supplies	142 232 703	30 929 835	30 141 970	50 755 611	31 011 943	(Z)	(Z)	(Z)	(Z)	(Z)
Construction work subcontracted out to others	130 105 731	26 244 399	25 763 826	45 071 445	35 156 830	(Z)	1	1	(Z)	1
Selected power, fuels, and lubricants	7 638 661	1 605 423	1 643 751	2 773 948	1 682 980	(Z)	(Z)	(Z)	(Z)	(Z)
Electricity	1 089 309	239 991	211 445	410 922	250 448	(Z)	1	1	1	1
Natural and manufactured gas	303 467	54 198	97 840	93 530	60 563	(Z)	1	1	1	1
Gasoline and diesel fuel	5 726 657	1 201 583	1 222 194	2 079 004	1 258 828	(Z)	(Z)	(Z)	(Z)	(Z)
On highway use	4 125 204	921 496	845 468	1 470 156	919 114	(Z)	(Z)	(Z)	(Z)	(Z)
Off highway use	1 601 450	280 087	376 726	608 848	339 714	(Z)	1	1	1	1
Other, including lubricating oils and greases	519 226	109 650	112 270	190 490	113 140	(Z)	1	1	1	1
Rental cost for machinery, equipment, and buildings	7 717 643	1 634 690	1 383 710	2 540 181	2 194 159	(Z)	1	1	1	1
For machinery and equipment	5 441 521	1 138 721	952 498	1 799 740	1 561 832	(Z)	1	1	1	1
For buildings	2 276 121	495 969	431 211	740 441	632 326	(Z)	1	1	1	1
Selected purchased services	7 539 794	1 527 626	1 629 245	2 698 825	1 760 803	(Z)	1	1	(Z)	1
Communication services	2 050 017	481 001	404 306	695 158	499 880	(Z)	1	1	1	1
Repairs to buildings and other structures	436 677	106 429	94 064	153 224	97 206	1	2	2	2	2
Repairs to machinery and equipment	5 053 097	940 196	1 130 874	1 850 442	1 163 717	(Z)	1	1	(Z)	1
Ownership of construction projects:										
Value of construction work	495 346 312	110 922 090	103 207 922	167 049 883	118 802 337	(Z)	(Z)	(Z)	(Z)	(Z)
Government owned	98 300 967	18 403 012	22 053 549	33 837 342	24 071 671	(Z)	1	1	1	1
Federal	26 434 306	3 665 897	5 307 614	9 797 524	7 670 233	1	1	1	1	1
State and local	71 866 661	14 737 115	16 745 934	24 039 818	16 401 438	(Z)	1	1	1	1
Privately owned	397 045 344	92 519 077	81 154 373	133 212 541	94 730 666	(Z)	(Z)	(Z)	(Z)	(Z)

Note: The 1987 United States total does not include data for "Land Subdividers and Developers," SIC 6552. The 1987 State data includes SIC 6552.

Table 6. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll by Geographic Area: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms and States included in census geographic regions, see appendixes]

Item	United States	Establishments located in the—				Relative standard error of estimate (percent) for column—				
		Northeast	Midwest	South	West	A	B	C	D	E
	A	B	C	D	E					
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT										
Beginning-of-year gross book value of depreciable assets -----	72 145 630	13 059 754	18 380 673	25 151 014	15 554 190	(Z)	1	1	1	1
Capital expenditures, other than land -----	7 902 110	1 175 981	2 247 672	2 672 176	1 806 280	1	1	1	1	1
New -----	5 906 727	909 007	1 675 948	2 043 668	1 278 103	1	1	1	1	1
Used -----	1 995 383	266 974	571 724	628 508	528 178	1	2	2	2	2
Retirements and disposition of depreciable assets -----	3 948 695	586 969	933 057	1 486 540	942 130	1	3	2	2	2
End-of-year gross book value of depreciable assets -----	76 099 045	13 648 765	19 695 288	26 336 650	16 418 341	(Z)	1	1	1	1
Depreciation charges during year -----	7 959 106	1 418 281	2 052 867	2 718 236	1 769 723	(Z)	1	1	1	1
Buildings and Other Structures, Additions, and Related Facilities										
Beginning-of-year gross book value of depreciable assets -----	11 194 295	1 969 043	2 606 560	4 344 244	2 274 449	1	2	2	2	2
Capital expenditures, other than land -----	784 990	141 764	203 591	264 139	175 496	2	3	4	3	4
New buildings and other structures -----	602 408	110 449	156 947	194 673	140 340	2	4	5	4	4
Used buildings and other structures -----	182 581	31 315	46 644	69 466	35 157	3	7	8	6	6
Retirements and disposition of depreciable assets -----	530 346	53 313	175 972	139 846	161 214	3	12	4	6	3
End-of-year gross book value of depreciable assets -----	11 448 939	2 057 493	2 634 179	4 468 536	2 288 731	1	2	1	2	2
Depreciation charges during year -----	828 553	153 847	194 715	296 432	183 560	1	3	2	3	3
Machinery and Equipment										
Beginning-of-year gross book value of depreciable assets -----	60 951 335	11 090 711	15 774 113	20 806 770	13 279 741	(Z)	1	1	1	1
Capital expenditures, other than land -----	7 117 120	1 034 217	2 044 081	2 408 037	1 630 784	1	1	1	1	1
New machinery and equipment, including automobiles and trucks -----	5 304 318	798 558	1 519 001	1 848 996	1 137 763	1	1	1	1	1
New automobiles and trucks, intended primarily for highway use -----	1 974 643	322 271	539 939	678 737	433 696	1	2	2	1	2
Used machinery and equipment, including automobiles and trucks -----	1 812 802	235 659	525 080	559 041	493 021	1	2	2	2	2
Retirements and disposition of depreciable assets -----	3 418 349	533 656	757 084	1 346 693	780 916	1	3	2	2	3
End-of-year gross book value of depreciable assets -----	64 650 106	11 591 272	17 061 109	21 868 114	14 129 610	(Z)	1	1	1	1
Depreciation charges during year -----	7 130 553	1 264 434	1 858 153	2 421 804	1 586 163	(Z)	1	1	1	1

Table 7. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll by Geographic Area: 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms and States included in census geographic regions, see appendixes]

Item	United States	Establishments located in the—				Relative standard error of estimate (percent) for column—				
		Northeast	Midwest	South	West	A	B	C	D	E
	A	B	C	D	E					
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT										
Beginning-of-year gross book value of depreciable assets -----	56 583 766	10 853 771	13 199 816	21 580 564	12 126 458	(Z)	1	1	1	1
Capital expenditures, other than land -----	8 281 784	1 967 479	1 847 872	2 962 788	1 615 530	(Z)	1	1	1	1
New -----	6 453 092	1 638 059	1 405 336	2 308 100	1 201 063	1	1	1	1	1
Used -----	1 828 692	329 420	442 535	654 688	414 466	1	2	2	1	2
Retirements and disposition of depreciable assets -----	3 418 263	546 858	668 016	1 534 540	789 981	1	5	2	2	2
End-of-year gross book value of depreciable assets -----	61 447 288	12 274 392	14 379 671	23 008 812	12 952 007	(Z)	1	1	1	1
Depreciation charges during year -----	7 358 890	1 563 510	1 600 441	2 790 178	1 524 046	(Z)	1	1	1	1
Buildings and other Structures, Additions, and Related Facilities										
Beginning-of-year gross book value of depreciable assets -----	11 759 037	2 462 783	2 660 686	4 512 789	2 749 797	1	3	3	1	2
Capital expenditures, other than land -----	1 262 842	269 220	258 192	506 526	295 576	1	2	3	3	3
New buildings and other structures -----	930 262	203 023	190 652	380 250	219 181	2	3	3	3	4
Used buildings and other structures -----	332 578	66 197	67 539	126 275	76 395	2	4	4	4	6
Retirements and disposition of depreciable assets -----	614 777	181 691	103 616	260 241	167 496	4	4	6	5	6
End-of-year gross book value of depreciable assets -----	12 407 102	2 550 312	2 815 261	4 759 074	2 877 877	1	2	2	1	2
Depreciation charges during year -----	1 047 943	220 209	215 645	435 307	233 065	1	2	4	1	2
Machinery and Equipment										
Beginning-of-year gross book value of depreciable assets -----	44 824 727	8 390 988	10 539 130	17 067 775	9 376 660	(Z)	1	1	1	1
Capital expenditures, other than land -----	7 018 941	1 698 259	1 589 679	2 456 262	1 319 953	(Z)	1	1	1	1
New machinery and equipment, including automobiles and trucks -----	5 522 827	1 435 036	1 214 683	1 927 850	981 882	1	1	1	1	1
New automobiles and trucks, intended primarily for highway use -----	2 558 831	728 920	536 940	852 126	455 155	1	1	1	1	1
Used machinery and equipment, including automobiles and trucks -----	1 496 111	263 222	374 996	528 412	338 071	1	2	2	2	2
Retirements and disposition of depreciable assets -----	2 803 484	365 167	564 399	1 274 299	622 484	1	3	2	3	2
End-of-year gross book value of depreciable assets -----	49 040 183	9 724 080	11 564 410	18 249 738	10 074 129	(Z)	1	1	1	1
Depreciation charges during year -----	6 310 946	1 343 301	1 384 796	2 354 871	1 290 980	(Z)	1	1	1	1

Note: The 1987 United States total does not include data for "Land Subdividers and Developers," SIC 6552. The 1987 State data includes SIC 6552.

Table 8. Value of Inventories for Establishments With Payroll by Geographic Area: 1992 and 1991

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms and States included in census geographic regions, see appendixes]

Item	United States	Establishments located in the—				Relative standard error of estimate (percent) for column—				
		Northeast	Midwest	South	West					
	A	B	C	D	E	A	B	C	D	E
All establishments:										
Number	572 851	117 413	138 355	185 431	131 653	(Z)	(Z)	(Z)	(Z)	(Z)
Value of construction work	528 105 847	96 471 165	126 317 414	175 602 138	129 715 129	(Z)	(Z)	(Z)	(Z)	(Z)
Establishments with inventories:										
Number	174 658	34 577	45 933	51 165	42 983	(Z)	1	1	1	1
Value of construction work	214 442 835	38 067 428	58 871 627	63 039 042	54 464 737	(Z)	(Z)	(Z)	(Z)	(Z)
Inventories ¹ :										
End of 1992, materials and supplies	7 186 087	1 257 651	1 858 976	2 347 890	1 721 571	1	3	2	2	2
End of 1991, materials and supplies	6 555 443	1 247 347	1 735 503	2 178 068	1 394 524	1	2	2	3	2
Establishments with no inventories:										
Number	204 929	41 243	49 954	67 043	46 690	(Z)	1	1	1	1
Value of construction work	204 630 721	34 507 045	45 854 271	72 899 350	51 370 055	(Z)	(Z)	(Z)	(Z)	(Z)
Establishments not reporting:										
Number	193 264	41 593	42 468	67 223	41 980	(Z)	1	1	1	1
Value of construction work	109 032 291	23 896 692	21 591 516	39 663 746	23 880 337	(Z)	(Z)	1	1	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 9. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments	572 851	358 645	110 704	58 712	32 047	8 351	3 438	699	191	65
All employees**	4 668 280	675 891	706 582	773 139	944 903	565 746	500 345	234 165	128 169	139 341
Payroll, all employees	117 729 651	11 248 729	14 336 293	18 394 177	25 703 413	16 765 000	15 386 631	7 557 666	3 851 927	4 485 815
Dollar value of business done	539 084 657	71 037 464	65 424 512	78 548 805	110 769 948	74 418 934	71 186 421	34 249 700	18 074 607	15 374 265
Value of construction work	528 105 847	70 051 576	64 267 436	77 166 580	108 727 957	72 866 138	69 472 149	33 385 236	17 505 307	14 663 468
Net value of construction work [†]	391 189 891	55 312 453	51 005 349	60 298 622	80 759 203	52 066 587	46 856 641	22 636 348	11 748 707	10 505 981
Value added ^{††}	234 617 817	30 489 519	29 568 883	35 842 182	48 391 321	31 932 535	28 766 758	14 217 400	7 651 504	7 757 716
Cost of materials, components, supplies, and fuels	167 550 884	25 808 823	22 593 542	25 838 666	34 409 873	21 686 848	19 804 155	9 283 412	4 666 503	3 459 062
Cost of construction work subcontracted out to others	136 915 956	14 739 123	13 262 087	16 867 958	27 968 754	20 799 551	22 615 508	10 748 889	5 756 600	4 157 487
Rental cost for machinery, equipment, and buildings	8 364 021	833 694	955 475	1 243 586	1 755 670	1 195 396	1 204 467	667 715	284 906	223 112
Capital expenditures, other than land	7 902 110	1 124 552	1 031 751	1 243 050	1 546 008	1 048 839	1 027 267	524 965	177 649	178 029
End-of-year gross book value of depreciable assets	76 099 045	9 311 582	9 352 108	11 357 807	15 430 496	10 275 212	10 824 124	4 684 009	1 964 201	2 899 505
1987										
All employees**	5 014 599	619 270	737 572	834 011	1 048 003	628 528	831 897	(D)	315 319	(D)
Value of construction work	495 346 313	57 003 686	57 331 421	72 045 916	103 647 657	70 186 791	102 767 671	(D)	32 363 171	(D)
Value added ^{††}	227 934 192	24 732 300	27 309 978	34 592 753	48 616 930	31 643 197	45 554 920	(D)	15 484 115	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees**	(Z)	(Z)	1	1	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Net value of construction work [†]	(Z)	1	1	1	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Capital expenditures, other than land	1	2	2	2	1	(Z)	(Z)	(Z)	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 10. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done of—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	572 851	(S)	(S)	80 373	155 489	100 447	69 472	53 286	19 516	9 779	7 363
All employees** -----	4 668 280	(S)	(S)	131 881	443 950	506 870	588 368	810 356	562 967	480 439	1 069 009
Payroll, all employees -----	117 729 651	(S)	(S)	1 511 454	6 457 808	9 176 783	12 384 318	20 173 160	15 744 373	14 867 406	36 774 816
Dollar value of business done -----	539 084 657	(S)	(S)	5 884 097	25 291 274	35 268 284	48 463 582	81 266 534	67 404 403	67 022 344	206 398 207
Value of construction work -----	528 105 847	(S)	(S)	5 824 803	25 001 181	34 780 828	47 637 147	79 680 491	66 127 683	65 823 667	201 161 345
Net value of construction work† -----	391 189 891	(S)	(S)	5 389 955	22 667 495	30 727 723	40 508 376	64 944 324	51 685 205	48 781 304	124 563 876
Value added†† -----	234 617 817	(S)	(S)	3 299 618	13 572 856	17 979 943	23 883 860	38 193 666	30 689 413	28 980 017	76 837 550
Cost of materials, components, supplies, and fuels -----	167 550 884	(S)	(S)	2 149 631	9 384 732	13 235 236	17 450 951	28 336 700	22 272 512	20 999 964	52 963 188
Cost of construction work subcontracted out to others -----	136 915 956	(S)	(S)	(S)	2 333 686	4 053 106	7 128 771	14 736 168	14 442 478	17 042 363	76 597 469
Rental cost for machinery, equipment, and buildings -----	8 364 021	(S)	(S)	84 804	383 337	582 425	810 961	1 323 784	1 061 461	1 082 728	3 007 872
Capital expenditures, other than land -----	7 902 110	(S)	(S)	124 650	540 740	716 142	865 886	1 311 973	975 421	954 544	2 375 334
End-of-year gross book value of depreciable assets -----	76 099 045	(S)	(S)	1 079 237	4 420 466	6 006 733	7 849 174	12 407 220	9 619 976	9 201 008	25 131 986
1987											
All employees** -----	5 014 599	(S)	(S)	(S)	475 893	530 638	615 692	866 639	636 467	525 720	1 124 887
Value of construction work -----	495 346 313	(S)	(S)	(S)	22 980 817	31 377 884	44 221 226	77 452 032	66 785 301	61 837 092	183 013 950
Value added†† -----	227 934 192	(S)	(S)	(S)	12 781 330	16 724 043	22 628 210	38 216 403	31 911 015	28 115 637	73 061 966
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	(S)	(S)	1	1	1	1	(Z)	(Z)	(Z)	(Z)
Net value of construction work† -----	(Z)	(S)	(S)	1	1	1	1	1	1	(Z)	(Z)
Capital expenditures, other than land -----	1	(S)	(S)	3	2	2	2	2	1	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 11. Value of Construction Work for Establishments With Payroll by Geographic Area and Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and type of construction	1992 value of construction work				1987 value of construction work	Relative standard error of estimate (percent) for column—				
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair		A	B	C	D	E
	A	B	C	D						
UNITED STATES										
Value of construction work	528 105 847	319 107 740	126 231 473	66 657 563	495 346 312	(Z)	(Z)	(Z)	(Z)	(Z)
Building construction	390 814 089	247 028 470	100 050 141	43 735 479	368 002 219	(Z)	(Z)	(Z)	(Z)	(Z)
Single-family houses	142 006 481	104 912 221	23 947 504	13 146 755	122 202 213	(Z)	1	1	1	(Z)
Single-family houses, detached	126 304 885	93 336 579	21 627 966	11 340 339	101 275 330	(Z)	1	1	1	(Z)
Single-family houses, attached, including townhouses and townhouse-type condominiums	15 701 596	11 575 642	2 319 538	1 806 416	20 926 883	1	1	2	2	1
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	15 533 543	8 743 197	3 929 506	2 860 839	22 056 956	1	1	2	1	(Z)
Other residential buildings, including hotels, motels, and tourist cabins	6 835 472	4 191 106	1 831 386	812 980	14 302 766	1	1	2	2	(Z)
Hotels, motels, and tourist cabins	4 855 341	3 070 924	1 201 486	582 932	8 886 196	1	1	2	2	(Z)
Other residential buildings	1 980 131	1 120 182	629 900	230 048	5 416 570	2	2	4	6	1
Office buildings	46 050 567	23 560 786	16 872 139	5 617 642	60 570 245	(Z)	(Z)	1	1	(Z)
Other commercial buildings such as stores, restaurants, and automobile service stations	47 762 061	28 172 996	13 341 287	6 247 778	46 268 031	(Z)	1	1	1	(Z)
Industrial buildings and warehouses	56 912 496	31 574 276	16 099 655	9 238 565	52 477 389	(Z)	(Z)	(Z)	1	(Z)
Industrial buildings	47 116 273	25 132 138	13 850 272	8 133 863	41 468 980	(Z)	(Z)	(Z)	1	(Z)
Warehouses	9 796 224	6 442 138	2 249 383	1 104 702	11 008 408	1	1	1	1	(Z)
Religious buildings	5 675 169	3 099 254	1 842 376	733 539	4 535 374	1	1	2	1	1
Educational buildings	27 595 656	16 512 324	9 089 429	1 993 904	16 282 332	1	1	1	1	(Z)
Hospitals and institutional buildings	28 980 784	17 176 761	9 903 696	1 900 327	19 304 912	(Z)	(Z)	1	1	(Z)
Farm buildings, nonresidential	1 833 864	1 295 205	257 322	281 337	1 560 000	2	3	4	4	2
Amusement, social, and recreational buildings, indoors	4 386 332	3 122 184	964 432	299 716	3 042 739	1	1	2	3	1
Other nonresidential buildings	7 241 666	4 668 159	1 971 409	602 097	5 399 262	1	1	2	3	1
Nonbuilding construction	121 182 687	72 079 270	26 181 332	22 922 084	105 411 556	(Z)	(Z)	(Z)	(Z)	(Z)
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	37 035 357	18 989 650	10 927 356	7 118 351	33 663 977	(Z)	(Z)	(Z)	1	(Z)
Outdoor swimming pools	2 154 214	1 650 364	253 392	250 459	2 273 408	3	4	5	6	2
Airport runways and related work	1 732 903	1 032 856	497 333	202 714	209 737	1	1	1	2	4
Private driveways and parking areas	3 736 473	1 981 117	802 807	952 549	3 562 808	2	2	3	3	2
Fencing	1 467 137	1 087 467	203 074	176 597	1 102 962	4	4	6	5	3
Recreational facilities	1 682 949	1 279 523	257 666	145 761	1 081 146	2	2	4	5	3
Bridges, tunnels, and elevated highways	8 979 560	5 784 279	2 305 891	889 390	7 051 964	1	1	1	2	(Z)
Tunnels	1 165 672	1 027 730	83 867	54 075	853 957	3	4	3	5	1
Bridges and elevated highways	7 813 887	4 756 549	2 222 024	835 314	6 198 007	1	1	1	2	(Z)
Dam and reservoir construction	955 628	682 211	223 998	49 420	990 275	1	2	1	9	1
Marine construction	2 123 215	1 337 113	269 025	517 077	1 595 976	1	1	2	2	1
Harbor and port facilities	635 303	366 730	135 747	132 825	617 795	2	3	4	5	3
Conservation and development construction	4 280 544	2 993 065	652 944	634 534	1 520 508	1	2	3	2	2
Power and communication transmission lines, towers, and related facilities	7 100 934	4 308 293	1 279 870	1 512 771	6 232 290	1	1	1	1	1
Sewers, water mains, and related facilities	14 914 749	11 108 657	2 205 382	1 600 710	13 476 048	1	1	1	2	1
Sewers, sewer lines, septic systems, and related facilities	8 638 489	6 415 414	1 321 371	901 704	7 917 914	1	1	1	3	1
Water mains and related facilities	6 276 260	4 693 243	884 011	699 006	5 558 134	1	1	2	2	1
Pipeline construction other than sewer or water lines	5 309 208	3 633 188	777 974	898 046	3 259 866	1	1	1	2	1
Mass transit construction	2 092 262	1 191 960	595 764	304 538	1 416 178	2	2	2	4	1
Urban mass transit	1 053 972	690 845	308 468	54 659	730 144	2	3	1	1	(Z)
Railroad construction	1 038 290	501 115	287 296	249 879	686 035	3	3	(Z)	5	2
Blast furnaces, petroleum refineries, chemical complexes, etc.	11 555 013	5 802 610	1 674 800	4 077 603	6 776 004	(Z)	(Z)	1	(Z)	(Z)
Power plants	6 866 721	3 278 022	1 106 218	2 482 480	6 915 722	(Z)	(Z)	1	1	(Z)
Power plants, nuclear	1 314 090	375 241	243 996	694 853	2 302 509	1	1	1	(Z)	(Z)
Power plants and cogeneration plants, except nuclear	5 552 631	2 902 781	862 222	1 787 627	4 613 214	(Z)	(Z)	1	1	(Z)
Sewage treatment and water treatment plants	6 529 397	4 494 959	1 710 939	323 500	6 057 721	1	1	1	2	1
Sewage treatment plants	4 402 483	3 077 895	1 147 916	176 671	4 099 467	1	2	2	3	1
Water treatment plants	2 126 915	1 417 064	563 022	146 829	1 958 255	1	1	1	3	1
Water storage facilities	420 918	246 633	(D)	(D)	(NA)	6	3	(D)	(D)	(NA)
Heavy military construction, missile sites, etc.	455 047	288 420	(D)	(D)	(NA)	1	1	(D)	(D)	(NA)
Ships	242 113	62 751	31 715	147 648	(NA)	4	10	7	5	(NA)
Oilfields	529 133	272 554	61 619	194 960	506 820	4	6	6	4	3
Other nonbuilding construction	383 910	206 850	77 386	99 674	7 100 351	4	5	9	5	1
Construction work, n.s.k.	16 109 071	(NA)	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)	(NA)
NORTHEAST										
Value of construction work	96 471 165	47 799 672	30 863 879	14 800 799	110 922 090	(Z)	1	(Z)	1	(Z)
Building construction	72 314 808	37 551 055	24 634 142	10 129 611	84 666 323	(Z)	1	1	1	(Z)
Single-family houses	21 551 913	13 589 299	5 291 973	2 670 641	27 161 748	1	2	1	1	1
Single-family houses, detached	18 622 739	11 641 802	4 679 855	2 301 082	20 881 384	1	2	1	2	1
Single-family houses, attached, including townhouses and townhouse-type condominiums	2 929 174	1 947 497	612 118	369 560	6 280 364	3	4	5	3	1
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	3 603 892	1 236 228	1 428 432	939 231	5 682 378	2	2	3	3	1
Other residential buildings, including hotels, motels, and tourist cabins	996 857	440 032	405 223	151 601	3 677 223	2	3	4	3	1
Hotels, motels, and tourist cabins	616 071	240 115	262 618	113 338	1 891 046	1	2	2	2	1
Other residential buildings	380 785	199 917	142 605	38 263	1 786 176	6	7	11	11	2
Office buildings	10 616 625	4 375 004	4 793 352	1 448 269	17 441 863	1	1	1	1	(Z)
Other commercial buildings such as stores, restaurants, and automobile service stations	8 893 536	4 530 012	2 885 344	1 478 179	9 623 494	1	1	1	2	1
Industrial buildings and warehouses	10 779 647	5 284 654	3 496 372	1 998 621	10 609 378	1	1	1	1	1
Industrial buildings	9 063 326	4 227 651	3 055 337	1 780 339	8 454 125	1	1	1	1	1
Warehouses	1 716 321	1 057 003	441 035	218 283	2 155 253	2	2	5	3	1
Religious buildings	851 647	341 311	347 138	163 199	803 078	2	3	2	3	2
Educational buildings	6 204 438	3 072 073	2 586 073	546 292	3 479 634	1	1	2	3	1
Hospitals and institutional buildings	6 413 945	3 268 654	2 655 187	490 104	4 299 620	1	1	1	1	1
Farm buildings, nonresidential	285 977	182 741	39 956	63 281	231 788	5	5	7	12	4
Amusement, social, and recreational buildings, indoors	618 559	335 556	225 271	57 732	473 527	2	2	3	6	2
Other nonresidential buildings	1 497 771	895 491	479 822	122 459	1 182 587	1	2	2	4	2

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CONSTRUCTION—GEOGRAPHIC AREA SERIES

Table 11. Value of Construction Work for Establishments With Payroll by Geographic Area and Type of Construction: 1992 and 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and type of construction	1992 value of construction work				1987 value of construction work	Relative standard error of estimate (percent) for column—				
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair		A	B	C	D	E
	A	B	C	D						
NORTHEAST—Con.										
Value of construction work—Con.	21 149 542	10 248 617	6 229 737	4 671 188	20 573 624	(Z)	1	1	1	(Z)
Nonbuilding construction										
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	6 061 540	2 370 775	2 229 705	1 461 059	5 620 886	1	1	1	2	1
Outdoor swimming pools	336 647	244 002	40 110	52 534	525 526	5	5	10	10	5
Airport runways and related work	175 425	52 895	95 061	27 469	44 628	3	9	1	1	2
Private driveways and parking areas	661 338	321 308	145 410	194 619	749 299	3	5	5	5	4
Fencing	292 274	197 778	48 734	45 761	183 878	7	8	9	14	8
Recreational facilities	205 438	135 460	39 773	30 206	179 741	4	4	6	9	6
Bridges, tunnels, and elevated highways	2 509 467	1 042 192	1 099 788	367 487	1 721 842	1	2	(Z)	3	1
Tunnels	388 252	345 110	26 475	16 667	268 408	3	3	3	5	2
Bridges and elevated highways	2 121 215	697 082	1 073 313	350 821	1 453 433	1	2	(Z)	3	1
Dam and reservoir construction	116 806	78 901	28 168	9 738	72 122	(Z)	(Z)	1	1	3
Marine construction	236 689	100 418	58 845	77 426	235 488	3	4	4	3	3
Harbor and port facilities	144 320	88 927	31 567	23 826	128 138	6	8	6	5	8
Conservation and development construction	556 481	371 142	120 447	64 891	158 785	3	3	5	4	5
Power and communication transmission lines, towers, and related facilities	1 169 540	627 940	233 865	307 735	1 262 487	2	3	2	2	1
Sewers, water mains, and related facilities	2 621 243	1 724 655	529 257	367 332	2 747 842	1	2	2	3	1
Sewers, sewer lines, septic systems, and related facilities	1 645 018	1 112 247	316 443	216 328	1 685 735	1	1	3	4	1
Water mains and related facilities	976 225	612 408	212 813	151 004	1 062 107	2	3	3	4	2
Pipeline construction other than sewer or water lines	766 682	457 878	114 030	194 774	516 323	2	2	3	3	2
Mass transit construction	688 758	250 690	371 270	66 798	703 761	3	4	3	11	1
Urban mass transit	473 930	198 910	251 176	23 844	505 767	(Z)	(Z)	1	1	(Z)
Railroad construction	214 828	51 780	120 094	42 954	197 994	9	20	9	17	4
Blast furnaces, petroleum refineries, chemical complexes, etc.	745 044	246 451	177 651	320 942	833 978	2	1	5	1	1
Power plants	2 076 973	857 442	301 778	917 754	2 270 942	(Z)	1	1	1	(Z)
Power plants, nuclear	265 988	107 133	(D)	(D)	715 855	1	1	(D)	(D)	(Z)
Power plants and cogeneration plants, except nuclear	1 810 985	750 308	(D)	(D)	1 555 087	1	1	(D)	(D)	(Z)
Sewage treatment and water treatment plants	1 610 115	996 606	529 132	84 377	1 306 081	1	1	2	5	1
Sewage treatment plants	1 093 704	676 464	369 557	47 683	854 387	1	1	2	8	1
Water treatment plants	516 410	320 141	159 575	36 694	451 694	1	1	2	4	2
Water storage facilities	103 744	58 425	19 597	25 723	(NA)	6	7	6	7	(NA)
Heavy military construction, missile sites, etc.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
Ships	*10 744	—	(D)	(D)	(NA)	55	—	(D)	(D)	(NA)
Oilfields	(D)	(D)	(D)	(D)	283	(D)	(D)	(D)	(D)	(Z)
Other nonbuilding construction	58 290	23 171	14 917	20 202	1 280 564	9	17	17	10	3
Construction work, n.s.k.	3 006 816	(NA)	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)	(NA)
MIDWEST										
Value of construction work	126 317 415	74 363 567	31 804 837	16 699 633	103 207 922	(Z)	(Z)	(Z)	1	(Z)
Building construction	93 716 797	57 671 388	24 584 299	11 461 109	76 474 773	(Z)	1	1	1	(Z)
Single-family houses	32 782 751	23 513 795	5 852 103	3 416 853	22 317 740	1	1	1	2	1
Single-family houses, detached	28 907 022	20 558 276	5 354 789	2 993 957	19 160 647	1	1	1	2	1
Single-family houses, attached, including townhouses and townhouse-type condominiums	3 875 729	2 955 519	497 314	422 896	3 157 092	2	3	5	5	2
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	3 211 257	1 910 967	752 664	547 626	3 968 852	2	4	3	3	1
Other residential buildings, including hotels, motels, and tourist cabins	1 338 129	800 189	358 570	179 370	2 385 434	2	2	4	6	1
Hotels, motels, and tourist cabins	767 929	422 477	213 282	132 170	1 504 966	2	3	4	6	1
Other residential buildings	570 199	377 712	145 287	47 200	880 467	3	3	7	13	3
Office buildings	9 742 742	5 318 975	3 190 993	1 232 774	11 069 843	1	1	1	1	(Z)
Other commercial buildings such as stores, restaurants, and automobile service stations	11 502 552	6 764 421	3 153 553	1 584 578	10 526 752	1	1	1	2	1
Industrial buildings and warehouses	16 937 247	9 091 540	5 076 791	2 768 916	14 845 192	1	1	1	1	(Z)
Industrial buildings	14 211 945	7 323 301	4 434 490	2 454 155	12 291 614	1	1	1	1	(Z)
Warehouses	2 725 301	1 768 238	642 302	314 761	2 553 577	1	2	2	2	1
Religious buildings	1 528 851	788 182	521 563	219 106	1 141 301	2	3	3	2	1
Educational buildings	6 555 665	3 571 917	2 381 118	602 630	3 343 680	1	1	2	2	1
Hospitals and institutional buildings	6 925 302	3 794 369	2 581 764	549 170	4 427 670	1	1	1	1	1
Farm buildings, nonresidential	836 651	587 322	116 233	133 096	721 458	3	4	6	5	4
Amusement, social, and recreational buildings, indoors	998 597	686 498	222 875	89 224	793 803	2	2	2	6	1
Other nonresidential buildings	1 357 053	843 213	376 073	137 767	933 401	2	2	3	8	2
Nonbuilding construction	29 151 240	16 692 179	7 220 538	5 238 523	22 674 337	(Z)	1	1	1	(Z)
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	10 243 395	4 587 379	3 431 602	2 224 414	8 300 148	(Z)	1	1	1	1
Outdoor swimming pools	193 687	126 132	41 977	25 578	226 085	7	7	13	14	8
Airport runways and related work	406 066	240 102	123 870	42 094	53 843	1	1	3	2	5
Private driveways and parking areas	1 151 512	611 617	264 372	275 523	947 444	3	3	4	7	3
Fencing	277 518	199 549	45 316	32 653	177 146	7	7	15	10	8
Recreational facilities	316 023	253 574	40 572	21 878	274 270	5	6	7	6	5
Bridges, tunnels, and elevated highways	2 470 100	1 596 756	608 471	264 873	1 810 850	2	3	2	4	1
Tunnels	430 361	400 316	20 484	9 561	152 955	9	10	11	16	3
Bridges and elevated highways	2 039 739	1 196 441	587 986	255 312	1 657 894	2	2	2	4	1
Dam and reservoir construction	198 776	173 400	(D)	(D)	127 933	3	2	(D)	(D)	2
Marine construction	302 244	185 012	36 689	80 544	345 723	4	5	3	8	1
Harbor and port facilities	54 207	26 462	8 852	18 893	49 717	8	8	10	17	14
Conservation and development construction	974 382	718 351	154 860	101 172	278 920	3	3	7	5	5
Power and communication transmission lines, towers, and related facilities	1 584 236	965 758	278 748	339 730	945 143	2	2	2	2	2
Sewers, water mains, and related facilities	4 128 719	3 099 058	638 789	390 872	3 094 219	1	2	3	3	1
Sewers, sewer lines, septic systems, and related facilities	2 504 400	1 873 466	409 876	221 058	2 031 194	1	2	2	4	1
Water mains and related facilities	1 624 319	1 225 591	228 914	169 814	1 063 024	2	2	5	3	2
Pipeline construction other than sewer or water lines	968 116	664 619	154 947	148 549	525 474	1	1	2	4	2
Mass transit construction	549 582	356 021	107 851	85 710	211 671	2	1	2	4	3
Urban mass transit	105 778	64 973	(S)	3 944	44 909	2	4	(S)	(Z)	6
Railroad construction	443 804	291 049	70 990	81 766	166 762	2	1	3	4	3
Blast furnaces, petroleum refineries, chemical complexes, etc.	2 435 739	1 369 603	441 381	624 755	911 290	(Z)	(Z)	1	1	1
Power plants	1 181 656	378 747	375 909	427 000	1 349 672	1	1	1	2	1
Power plants, nuclear	221 963	24 768	131 261	65 934	(D)	2	17	1	1	(D)

CONSTRUCTION—GEOGRAPHIC AREA SERIES

U.S. SUMMARY—WITH PAYROLL US-17

Table 11. Value of Construction Work for Establishments With Payroll by Geographic Area and Type of Construction: 1992 and 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and type of construction	1992 value of construction work				1987 value of construction work	Relative standard error of estimate (percent) for column—				
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair						
	A	B	C	D		A	B	C	D	E
MIDWEST—Con.										
Value of construction work—Con.										
Nonbuilding construction—Con.										
Power plants and cogeneration plants, except nuclear	959 693	353 979	244 647	361 066	(D)	1	(Z)	1	2	(D)
Sewage treatment and water treatment plants	1 571 996	1 067 602	420 637	83 758	1 733 865	1	2	2	4	1
Sewage treatment plants	1 077 572	771 935	255 043	50 594	1 358 215	1	1	2	7	1
Water treatment plants	494 424	295 667	165 593	33 164	375 650	2	3	2	3	3
Water storage facilities	(D)	(D)	6 565	15 902	(NA)	(D)	(D)	12	18	(NA)
Heavy military construction, missile sites, etc.	(S)	(S)	—	—	(NA)	(S)	(S)	—	—	(NA)
Ships	(D)	(D)	—	(D)	(NA)	(D)	(D)	—	(D)	(NA)
Oilfields	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other nonbuilding construction	65 866	30 055	19 385	16 425	1 186 067	9	9	20	12	3
Construction work, n.s.k.	3 449 378	(NA)	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)	(NA)
SOUTH										
Value of construction work	175 602 138	111 836 456	35 999 762	22 320 946	167 049 883	(Z)	(Z)	(Z)	(Z)	(Z)
Building construction	126 413 011	84 272 081	28 530 584	13 610 346	120 229 718	(Z)	(Z)	1	1	(Z)
Single-family houses	48 594 092	37 854 185	6 593 476	4 146 431	41 455 253	1	1	1	1	1
Single-family houses, detached	43 952 919	34 360 408	5 986 557	3 605 955	35 009 397	1	1	1	1	1
Single-family houses, attached, including townhouses and townhouse-type condominiums	4 641 173	3 493 777	606 920	540 477	6 445 856	2	2	4	3	1
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	4 791 206	2 962 684	1 043 529	784 993	7 179 198	2	3	3	3	1
Other residential buildings, including hotels, motels, and tourist cabins	1 809 015	988 227	551 714	269 075	4 198 734	3	3	5	4	1
Hotels, motels, and tourist cabins	1 251 055	735 144	340 254	175 658	2 712 459	3	4	8	2	1
Other residential buildings	557 960	253 083	211 460	93 417	1 486 275	4	5	6	9	2
Office buildings	14 440 936	7 839 291	4 937 156	1 664 489	18 489 285	1	1	1	1	(Z)
Other commercial buildings such as stores, restaurants, and automobile service stations	15 469 471	9 470 370	4 047 692	1 951 410	15 242 464	1	1	1	1	1
Industrial buildings and warehouses	17 340 952	9 750 400	4 488 034	3 102 519	16 149 965	1	1	1	1	(Z)
Industrial buildings	14 189 753	7 649 589	3 808 553	2 731 611	12 535 608	1	1	1	1	(Z)
Warehouses	3 151 200	2 100 811	679 481	370 907	3 614 356	1	1	2	2	1
Religious buildings	2 195 803	1 341 137	625 778	228 887	1 790 428	1	2	2	3	1
Educational buildings	8 387 946	5 515 445	2 347 172	525 329	5 941 950	1	1	2	2	1
Hospitals and institutional buildings	8 964 514	5 536 600	2 869 911	558 003	6 282 742	1	1	1	2	1
Farm buildings, nonresidential	449 642	348 521	51 991	49 130	406 988	5	6	10	8	4
Amusement, social, and recreational buildings, indoors	1 380 700	1 029 224	242 060	109 415	1 231 893	1	1	5	5	1
Other nonresidential buildings	2 588 732	1 635 998	732 071	220 664	1 860 813	1	1	3	5	2
Nonbuilding construction	43 744 153	27 564 375	7 469 177	8 710 600	38 489 193	(Z)	(Z)	1	1	(Z)
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	12 637 534	7 567 331	3 033 364	2 036 839	12 500 354	(Z)	1	1	1	1
Outdoor swimming pools	883 519	698 454	87 859	97 206	875 726	5	5	8	8	4
Airport runways and related work	499 970	230 685	191 363	77 922	75 768	1	1	2	4	7
Private driveways and parking areas	1 099 510	634 102	199 881	265 527	1 031 253	3	3	6	5	3
Fencing	457 380	348 989	61 540	46 850	325 237	8	10	12	9	7
Recreational facilities	592 083	457 702	88 645	45 737	368 456	3	3	8	8	5
Bridges, tunnels, and elevated highways	2 412 285	1 887 049	355 745	169 491	2 230 514	1	1	1	3	1
Tunnels	159 971	129 078	23 487	7 407	221 181	3	2	2	23	2
Bridges and elevated highways	2 252 314	1 757 971	332 258	162 084	2 009 333	1	1	1	3	1
Dam and reservoir construction	299 771	159 888	(D)	(D)	296 379	2	2	(D)	(D)	3
Marine construction	1 212 283	817 084	139 685	255 514	712 314	2	1	4	3	2
Harbor and port facilities	219 820	127 949	45 044	46 828	250 713	5	7	9	4	3
Conservation and development construction	1 568 871	1 080 783	207 546	280 542	523 869	3	4	7	4	3
Power and communication transmission lines, towers, and related facilities	2 774 175	1 732 506	451 903	589 766	2 643 907	1	2	2	2	1
Sewers, water mains, and related facilities	4 492 337	3 464 367	582 121	445 848	4 611 283	1	1	2	4	1
Sewers, sewer lines, septic systems, and related facilities	2 600 772	1 999 789	335 035	265 947	2 631 393	2	2	3	6	1
Water mains and related facilities	1 891 565	1 464 578	247 086	179 901	1 979 889	2	2	3	3	1
Pipeline construction other than sewer or water lines	2 271 701	1 667 194	281 300	323 207	1 359 463	2	2	3	4	1
Mass transit construction	478 654	259 215	88 347	131 092	307 163	5	6	6	7	3
Urban mass transit	200 452	164 261	12 959	23 233	108 964	6	8	6	(Z)	1
Railroad construction	278 202	94 954	75 389	107 859	198 198	7	8	7	8	4
Blast furnaces, petroleum refineries, chemical complexes, etc.	6 809 571	3 378 534	767 684	2 663 353	3 872 944	(Z)	(Z)	1	(Z)	(Z)
Power plants	2 382 582	1 318 194	253 367	811 021	1 789 141	1	1	2	1	(Z)
Power plants, nuclear	583 853	208 336	14 309	361 208	535 533	(Z)	1	2	(Z)	(Z)
Power plants and cogeneration plants, except nuclear	1 798 729	1 109 858	239 058	449 813	1 253 607	1	1	2	2	(Z)
Sewage treatment and water treatment plants	1 747 291	1 256 775	402 469	88 046	1 925 032	3	4	3	6	1
Sewage treatment plants	1 163 988	856 214	261 532	46 242	1 244 991	5	5	4	7	1
Water treatment plants	583 303	400 561	140 937	41 805	680 041	2	2	4	8	1
Water storage facilities	199 089	110 065	16 612	72 412	(NA)	11	5	16	27	(NA)
Heavy military construction, missile sites, etc.	25 484	16 175	(D)	(D)	(NA)	3	(Z)	(D)	(D)	(NA)
Ships	175 417	54 113	23 538	97 766	(NA)	5	11	9	4	(NA)
Oilfields	336 876	205 992	33 284	97 600	279 467	5	7	10	4	4
Other nonbuilding construction	167 950	91 229	(D)	(D)	2 230 490	6	8	(D)	(D)	2
Construction work, n.s.k.	5 444 974	(NA)	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)	(NA)

Table 11. Value of Construction Work for Establishments With Payroll by Geographic Area and Type of Construction: 1992 and 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and type of construction	1992 value of construction work				1987 value of construction work	Relative standard error of estimate (percent) for column—				
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair		A	B	C	D	E
	A	B	C	D						
WEST										
Value of construction work	129 715 130	85 108 045	27 562 996	12 836 186	118 802 337	(Z)	(Z)	(Z)	1	(Z)
Building construction	98 369 474	67 533 945	22 301 116	8 534 413	89 559 826	(Z)	(Z)	1	1	(Z)
Single-family houses	39 077 724	29 954 943	6 209 952	2 912 830	33 404 376	1	1	1	1	1
Single-family houses, detached	34 822 204	26 776 093	5 606 765	2 439 346	28 000 842	1	1	1	2	1
Single-family houses, attached, including townhouses and townhouse-type condominiums	4 255 520	3 178 850	603 186	473 484	5 403 534	2	2	3	3	1
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	3 927 187	2 633 318	704 881	588 988	5 432 183	2	2	3	2	1
Other residential buildings, including hotels, motels, and tourist cabins	2 691 471	1 962 658	515 880	212 933	4 214 056	1	1	3	3	1
Hotels, motels, and tourist cabins	2 220 285	1 673 188	385 332	161 765	2 914 007	1	1	2	2	1
Other residential buildings	471 186	289 470	130 547	51 168	1 300 049	5	5	7	12	2
Office buildings	11 250 265	6 027 516	3 950 638	1 272 110	13 722 303	1	1	1	1	(Z)
Other commercial buildings such as stores, restaurants, and automobile service stations	11 896 502	7 408 193	3 254 699	1 233 611	10 978 281	1	1	2	2	1
Industrial buildings and warehouses	11 854 650	7 447 682	3 038 459	1 368 509	10 980 149	1	1	1	1	(Z)
Industrial buildings	9 651 248	5 931 597	2 551 893	1 167 758	8 247 114	1	1	1	2	1
Warehouses	2 203 402	1 516 085	486 566	200 751	2 733 034	1	1	2	3	1
Religious buildings	1 098 868	628 623	347 897	122 348	801 130	3	4	6	3	2
Educational buildings	6 447 606	4 352 888	1 775 066	319 652	3 517 121	1	1	2	2	1
Hospitals and institutional buildings	6 677 022	4 577 139	1 796 834	303 050	4 294 988	1	(Z)	2	2	1
Farm buildings, nonresidential	261 594	176 621	49 142	35 830	200 249	5	6	9	10	7
Amusement, social, and recreational buildings, indoors	1 388 476	1 070 906	274 225	43 345	547 466	2	3	4	4	2
Other nonresidential buildings	1 798 109	1 293 458	383 444	121 207	1 467 518	2	2	4	6	2
Nonbuilding construction	27 137 752	17 574 099	5 261 880	4 301 773	23 911 103	(Z)	(Z)	1	1	(Z)
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	8 092 888	4 464 165	2 232 685	1 396 038	7 271 115	1	1	1	1	1
Outdoor swimming pools	740 361	581 776	83 445	75 140	646 068	7	8	9	12	4
Airport runways and related work	651 442	509 174	87 040	55 229	35 495	1	1	4	2	13
Private driveways and parking areas	824 113	414 089	193 144	216 880	834 808	4	4	5	8	2
Fencing	439 965	341 151	47 482	51 332	416 699	5	5	9	8	5
Recreational facilities	569 404	432 787	88 677	47 940	291 851	4	5	9	12	5
Bridges, tunnels, and elevated highways	1 587 708	1 258 281	241 888	87 539	1 288 756	1	1	2	6	1
Tunnels	187 088	153 226	13 422	20 441	211 411	2	1	8	5	1
Bridges and elevated highways	1 400 620	1 105 055	228 466	67 098	1 077 345	1	1	2	8	1
Dam and reservoir construction	340 274	270 022	54 842	15 410	493 839	4	4	4	13	1
Marine construction	371 999	234 599	33 806	103 594	302 450	3	3	4	7	1
Harbor and port facilities	216 956	123 392	50 285	43 278	190 699	3	2	5	13	3
Conservation and development construction	1 180 809	822 790	170 091	187 929	559 098	2	3	4	3	3
Power and communication transmission lines, towers, and related facilities	1 572 983	982 088	315 354	275 540	1 381 278	1	2	2	2	1
Sewers, water mains, and related facilities	3 672 450	2 820 577	455 215	396 658	3 053 451	1	1	2	3	1
Sewers, sewer lines, septic systems, and related facilities	1 888 299	1 429 912	260 017	198 370	1 588 760	2	2	3	4	2
Water mains and related facilities	1 784 151	1 390 665	195 198	198 287	1 464 691	1	2	2	3	2
Pipeline construction other than sewer or water lines	1 302 710	843 497	227 697	231 516	858 605	1	1	1	1	2
Mass transit construction	375 267	326 034	28 295	20 938	193 581	4	5	2	3	3
Urban mass transit	273 812	262 702	7 472	3 638	70 502	5	6	2	(Z)	3
Railroad construction	101 455	63 332	20 823	17 300	123 078	6	10	2	3	5
Blast furnaces, petroleum refineries, chemical complexes, etc.	1 564 659	808 022	288 084	468 553	1 157 790	1	2	1	1	1
Power plants	1 225 510	723 639	175 165	326 705	1 505 965	1	1	1	1	(Z)
Power plants, nuclear	242 285	35 003	(D)	(D)	(D)	2	8	(D)	(D)	(D)
Power plants and cogeneration plants, except nuclear	983 224	688 636	(D)	(D)	(D)	1	(Z)	(D)	(D)	(D)
Sewage treatment and water treatment plants	1 599 995	1 173 976	358 701	67 319	1 092 740	1	1	3	4	1
Sewage treatment plants	1 067 218	773 282	261 784	32 152	641 872	1	1	4	3	2
Water treatment plants	532 777	400 694	96 916	35 167	450 868	2	1	3	7	2
Water storage facilities	(D)	(D)	(D)	(D)	(NA)	(D)	(D)	(D)	(D)	(NA)
Heavy military construction, missile sites, etc.	(D)	(D)	(D)	(D)	(NA)	(D)	(D)	(D)	(D)	(NA)
Ships	(D)	(D)	(D)	(D)	(NA)	(D)	(D)	(D)	(D)	(NA)
Oilfields	173 126	57 394	25 042	90 690	(D)	6	10	5	8	(D)
Other nonbuilding construction	91 805	62 395	(D)	(D)	1 568 775	8	9	(D)	(D)	2
Construction work, n.s.k.	4 207 903	(NA)	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)	(NA)

Table 12. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States -----	572 851	3 596 200	3 279 642	3 650 182	3 872 139	3 582 836	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Alabama -----	7 653	62 106	59 013	62 785	65 242	61 383	1	1	1	1	1	1
Alaska -----	1 676	10 180	7 508	10 517	12 859	9 834	1	2	3	2	2	3
Arizona -----	8 306	66 453	60 322	66 550	71 052	67 887	1	1	1	1	1	1
Arkansas -----	4 445	27 101	24 927	27 828	28 931	26 719	1	1	1	1	1	1
California -----	64 103	388 254	375 920	394 143	409 834	373 118	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Colorado -----	9 704	65 441	57 258	65 986	71 489	67 028	1	1	1	1	1	1
Connecticut -----	8 828	41 211	34 657	41 967	45 533	42 688	1	1	1	1	1	1
Delaware -----	2 071	13 680	12 265	13 977	14 449	14 027	1	1	1	1	2	2
District of Columbia -----	333	5 212	5 168	5 284	5 366	5 031	4	3	3	3	3	3
Florida -----	34 291	203 988	195 863	204 382	210 059	205 648	(Z)	1	1	1	1	1
Georgia -----	13 581	95 113	90 860	97 188	98 126	94 278	1	1	1	1	1	1
Hawaii -----	2 481	24 651	24 533	24 179	24 911	24 983	1	1	1	1	1	1
Idaho -----	3 541	17 252	14 912	17 453	19 305	17 336	1	2	2	2	2	2
Illinois -----	24 579	161 927	138 315	168 152	180 037	161 203	(Z)	1	1	1	1	1
Indiana -----	13 124	90 667	80 532	91 493	99 227	91 417	(Z)	1	1	1	1	1
Iowa -----	6 707	39 249	32 254	42 072	44 409	38 261	1	1	1	1	1	1
Kansas -----	5 940	37 687	34 107	37 903	42 057	36 680	1	1	1	1	1	1
Kentucky -----	7 337	50 354	45 506	50 903	54 176	50 829	1	1	1	1	1	2
Louisiana -----	6 404	75 352	73 498	76 456	76 895	74 558	1	1	1	1	1	1
Maine -----	3 993	16 585	12 410	16 792	19 802	17 336	1	2	2	2	2	2
Maryland -----	13 782	102 371	95 903	103 688	108 680	101 216	(Z)	1	1	1	1	1
Massachusetts -----	13 447	64 329	56 463	64 057	69 900	66 895	1	1	1	1	1	1
Michigan -----	20 446	107 740	88 548	110 000	122 867	109 543	(Z)	1	1	1	1	1
Minnesota -----	10 664	66 389	53 385	68 726	77 450	65 995	1	2	2	2	2	2
Mississippi -----	3 938	27 763	24 925	27 358	29 952	28 816	1	1	2	1	1	1
Missouri -----	12 828	75 777	69 086	77 324	82 863	73 834	1	1	1	1	1	1
Montana -----	2 561	10 600	8 613	10 895	12 282	10 611	1	2	2	2	2	2
Nebraska -----	4 324	23 444	20 357	24 421	25 933	23 065	1	1	1	1	1	1
Nevada -----	3 311	31 415	29 318	31 151	33 081	32 112	1	1	1	1	1	1
New Hampshire -----	3 319	12 885	10 253	13 109	14 675	13 501	1	1	2	2	1	2
New Jersey -----	19 643	99 149	90 137	100 724	106 712	99 024	(Z)	1	1	1	1	1
New Mexico -----	4 001	24 969	22 788	25 179	26 999	24 910	1	2	2	2	2	2
New York -----	36 550	193 972	170 732	198 219	214 006	192 930	(Z)	(Z)	1	(Z)	1	1
North Carolina -----	18 428	113 374	110 260	114 146	117 451	111 640	(Z)	1	1	1	1	1
North Dakota -----	1 677	9 734	7 071	10 214	11 891	9 760	1	2	2	2	2	2
Ohio -----	23 352	144 844	124 673	147 329	159 056	148 318	(Z)	(Z)	1	1	1	1
Oklahoma -----	5 596	34 294	32 525	34 299	36 417	33 936	1	1	1	1	1	1
Oregon -----	8 631	40 854	39 645	40 468	44 207	39 096	1	1	1	1	1	1
Pennsylvania -----	26 222	165 712	145 420	168 557	182 251	166 621	(Z)	(Z)	(Z)	1	1	1
Rhode Island -----	2 866	10 587	9 007	10 697	11 926	10 717	1	1	2	2	2	2
South Carolina -----	8 444	53 984	52 022	54 367	55 276	54 270	1	1	1	1	1	1
South Dakota -----	1 999	10 294	8 214	10 771	11 826	10 367	1	2	2	2	2	2
Tennessee -----	9 270	70 234	64 834	70 201	73 299	72 600	1	1	1	1	1	1
Texas -----	29 110	261 195	253 941	264 221	271 214	255 405	(Z)	(Z)	(Z)	(Z)	1	1
Utah -----	4 366	27 708	24 305	28 258	30 324	27 945	1	1	1	2	1	1
Vermont -----	2 544	9 186	7 090	9 164	10 907	9 585	1	2	3	2	2	2
Virginia -----	17 151	111 868	106 087	113 444	117 088	110 855	(Z)	1	1	1	1	1
Washington -----	17 279	94 066	88 515	95 459	100 893	91 398	(Z)	1	1	1	1	1
West Virginia -----	3 595	20 244	16 843	20 637	22 459	21 038	1	1	2	1	2	2
Wisconsin -----	12 714	75 745	61 228	78 018	86 213	77 523	1	1	1	1	1	1
Wyoming -----	1 692	9 012	7 625	9 072	10 288	9 065	1	2	2	2	2	2

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 13. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	528 105 847	570 182	471 051 746	80 616	57 054 101	495 346 313	6.6	(Z)	(Z)	(Z)
Alabama -----	6 951 298	7 583	5 884 287	1 762	1 067 011	6 039 126	15.1	1	1	1
Alaska -----	2 053 871	1 655	1 800 940	183	252 932	1 882 643	9.1	3	3	1
Arizona -----	9 589 024	8 250	8 587 437	737	1 001 587	10 263 814	-6.6	1	1	1
Arkansas -----	3 369 320	4 416	(D)	1 056	(D)	2 694 190	25.1	1	2	2
California -----	65 586 751	64 038	61 865 369	1 705	3 721 382	71 375 850	-8.1	(Z)	(Z)	1
Colorado -----	9 820 807	9 671	8 908 882	819	911 925	7 287 928	34.8	1	1	2
Connecticut -----	6 888 318	8 786	(D)	1 631	(D)	9 282 522	-25.8	1	1	1
Delaware -----	2 073 773	2 054	1 491 991	1 321	581 782	1 843 436	12.5	2	2	3
District of Columbia -----	2 133 516	322	586 250	2 641	1 547 267	2 856 749	-25.3	1	3	2
Florida -----	31 450 528	34 185	28 750 391	2 119	2 700 137	31 949 294	-1.6	1	1	1
Georgia -----	13 735 421	13 486	11 937 640	2 494	1 797 782	14 934 794	-8.0	1	1	1
Hawaii -----	5 558 404	2 481	4 833 101	387	725 302	3 081 786	80.4	1	1	1
Idaho -----	2 290 445	3 487	1 883 639	817	406 806	1 151 102	99.0	2	2	2
Illinois -----	26 775 737	24 529	24 878 505	2 918	1 897 231	23 086 672	16.0	1	1	1
Indiana -----	11 589 958	13 042	10 373 919	2 631	1 216 040	8 433 127	37.4	1	1	3
Iowa -----	4 996 920	6 674	4 423 448	1 497	573 472	3 035 342	64.6	1	1	2
Kansas -----	4 919 427	5 869	4 070 401	1 628	849 026	4 341 425	13.3	2	2	1
Kentucky -----	6 718 369	7 299	5 417 893	2 541	1 300 476	5 070 998	32.5	1	1	1
Louisiana -----	7 903 816	6 384	6 593 406	1 135	1 310 410	5 900 686	33.9	1	1	1
Maine -----	2 132 365	3 979	1 798 415	698	333 950	2 610 939	-18.3	2	2	1
Maryland -----	12 884 968	13 688	11 084 938	2 986	1 800 029	13 877 511	-7.2	1	1	1
Massachusetts -----	11 054 256	13 374	10 100 093	1 831	954 163	15 679 792	-29.5	1	1	2
Michigan -----	16 131 386	20 410	(D)	1 688	(D)	15 607 139	3.4	1	1	1
Minnesota -----	10 546 812	10 621	9 922 437	1 348	624 375	8 996 289	17.2	1	1	1
Mississippi -----	3 398 199	3 886	2 662 027	1 356	736 172	2 671 906	27.2	2	2	2
Missouri -----	9 850 358	12 747	8 669 521	1 905	1 180 837	9 450 891	4.2	1	1	2
Montana -----	1 398 436	2 557	1 254 480	424	143 956	1 008 552	38.7	2	2	4
Nebraska -----	3 288 678	4 310	2 905 607	756	383 070	2 179 792	50.9	2	2	3
Nevada -----	6 243 372	3 301	5 078 066	1 031	1 165 307	4 100 625	52.3	1	1	1
New Hampshire -----	1 686 123	3 262	1 361 403	1 395	324 720	3 693 661	-54.4	2	2	3
New Jersey -----	16 136 366	19 468	14 231 861	2 926	1 904 505	21 175 314	-23.8	1	1	1
New Mexico -----	3 056 414	3 951	2 510 677	648	545 737	2 601 128	17.5	2	2	2
New York -----	31 911 435	36 457	29 224 419	3 281	2 687 016	34 187 680	-6.7	(Z)	(Z)	1
North Carolina -----	14 335 009	18 351	(D)	2 417	(D)	13 130 983	9.2	1	1	1
North Dakota -----	1 140 470	1 673	910 717	420	229 753	954 682	19.5	2	2	3
Ohio -----	20 840 164	23 257	19 281 296	2 625	1 558 868	17 297 754	20.5	1	1	1
Oklahoma -----	3 906 238	5 540	3 394 596	956	511 643	3 095 102	26.2	1	2	2
Oregon -----	6 291 808	8 575	(D)	1 079	(D)	3 706 502	69.8	1	1	1
Pennsylvania -----	23 670 089	26 072	21 225 020	3 460	2 445 069	21 142 311	12.0	(Z)	1	1
Rhode Island -----	1 712 672	2 849	1 497 810	860	214 862	1 856 546	-7.7	2	2	5
South Carolina -----	6 450 137	8 372	5 326 032	2 079	1 124 105	6 283 112	2.7	1	1	1
South Dakota -----	1 392 098	1 978	1 116 419	684	275 679	803 328	73.3	2	3	2
Tennessee -----	8 769 583	9 212	7 601 335	1 718	1 168 248	8 706 647	.7	1	1	1
Texas -----	35 609 383	29 016	(D)	1 662	(D)	30 195 664	17.9	1	1	1
Utah -----	3 427 102	4 347	3 079 197	369	347 905	2 565 695	33.6	1	2	3
Vermont -----	1 159 499	2 536	920 544	501	238 955	1 404 339	-17.4	2	2	2
Virginia -----	15 216 862	17 061	12 412 002	3 723	2 804 860	17 419 182	-12.6	1	1	1
Washington -----	15 553 070	17 224	13 749 462	1 525	1 803 608	9 075 377	71.4	1	1	1
West Virginia -----	2 568 212	3 549	1 645 821	1 773	922 391	1 889 279	35.9	1	2	1
Wisconsin -----	10 836 201	12 668	(D)	1 719	(D)	7 169 981	51.1	1	1	2
Wyoming -----	1 102 377	1 679	846 548	752	255 829	933 027	18.2	2	2	2

Note: The 1987 United States total does not include data for "Land Subdividers and Developers," SIC 6552. The 1987 State data includes SIC 6552.

Table 14. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Per dollar of value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	8.1	25.2	146.9	.223	.317	.259	.270	.016
Alabama -----	10.2	20.9	120.1	.220	.352	.260	.237	.014
Alaska -----	7.7	36.5	184.3	.252	.322	.213	.286	.023
Arizona -----	10.4	22.0	155.4	.184	.276	.339	.301	.016
Arkansas -----	7.7	19.1	121.9	.197	.361	.248	.237	.016
California -----	8.0	27.8	165.5	.221	.287	.279	.321	.020
Colorado -----	8.6	24.4	161.3	.194	.308	.298	.288	.016
Connecticut -----	6.3	30.4	173.3	.235	.289	.251	.249	.017
Delaware -----	8.5	25.2	131.5	.247	.310	.241	.252	.021
District of Columbia -----	20.9	30.9	195.4	.211	.215	.452	.187	.013
Florida -----	8.0	20.8	147.2	.190	.336	.281	.260	.015
Georgia -----	9.1	21.9	144.7	.197	.339	.285	.238	.014
Hawaii -----	13.1	34.3	196.1	.230	.315	.265	.277	.017
Idaho -----	6.3	21.6	131.1	.212	.350	.244	.260	.015
Illinois -----	8.6	30.6	165.1	.243	.292	.255	.292	.015
Indiana -----	8.8	25.3	131.1	.247	.341	.207	.257	.014
Iowa -----	7.3	22.7	129.7	.219	.354	.231	.235	.012
Kansas -----	8.1	22.6	139.4	.206	.350	.250	.233	.016
Kentucky -----	8.7	21.4	126.3	.214	.354	.248	.252	.014
Louisiana -----	14.3	22.9	100.1	.279	.348	.165	.213	.023
Maine -----	5.4	21.1	117.6	.232	.338	.194	.220	.017
Maryland -----	9.7	25.6	143.1	.235	.307	.282	.292	.014
Massachusetts -----	6.5	28.9	177.0	.220	.293	.275	.280	.014
Michigan -----	6.9	25.9	149.0	.228	.328	.251	.290	.015
Minnesota -----	8.1	28.5	176.9	.209	.290	.298	.262	.015
Mississippi -----	8.8	18.8	113.6	.206	.378	.225	.232	.016
Missouri -----	7.6	24.7	142.1	.223	.321	.261	.276	.013
Montana -----	5.2	22.0	133.5	.208	.368	.230	.243	.017
Nebraska -----	7.0	21.6	141.4	.196	.368	.223	.252	.013
Nevada -----	12.4	28.4	165.6	.224	.294	.281	.340	.017
New Hampshire -----	5.2	24.0	137.5	.233	.360	.228	.297	.018
New Jersey -----	6.7	30.5	166.3	.243	.298	.215	.267	.015
New Mexico -----	7.7	19.7	111.7	.219	.313	.229	.269	.016
New York -----	7.0	29.4	158.4	.247	.297	.243	.264	.014
North Carolina -----	7.9	20.4	122.2	.215	.357	.245	.254	.013
North Dakota -----	7.0	21.3	117.6	.220	.354	.199	.201	.021
Ohio -----	8.2	26.1	152.0	.226	.335	.261	.255	.014
Oklahoma -----	7.8	21.4	122.9	.221	.334	.236	.246	.018
Oregon -----	6.2	25.5	150.3	.221	.319	.261	.300	.020
Pennsylvania -----	8.1	26.3	144.9	.234	.308	.250	.253	.015
Rhode Island -----	4.9	25.7	170.9	.199	.294	.304	.233	.015
South Carolina -----	8.3	20.3	115.2	.228	.351	.255	.265	.014
South Dakota -----	6.4	19.7	119.9	.205	.355	.208	.249	.015
Tennessee -----	9.7	21.9	134.8	.208	.337	.292	.242	.013
Texas -----	11.5	23.9	140.6	.218	.325	.252	.232	.018
Utah -----	8.0	22.2	136.2	.205	.317	.287	.307	.017
Vermont -----	4.7	20.3	130.3	.201	.326	.279	.161	.015
Virginia -----	8.4	22.0	125.4	.225	.331	.252	.284	.014
Washington -----	7.0	27.5	163.4	.218	.320	.266	.277	.016
West Virginia -----	6.9	21.7	98.7	.271	.349	.142	.204	.018
Wisconsin -----	7.6	27.2	146.3	.238	.335	.234	.275	.014
Wyoming -----	6.5	21.5	101.6	.257	.347	.189	.212	.027

Table 15. Selected Statistics for Establishments With Payroll for Consolidated Metropolitan Statistical Areas and Selected Metropolitan Statistical Areas: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
	A	B	C	D	E	F	G	H	I	B	E
Albany–Schenectady–Troy, NY MSA	2 202	16 191	442 078	1 933 524	1 474 339	888 242	615 221	459 185	22 061	2	2
Allentown–Bethlehem–Easton, PA MSA	1 482	9 555	228 424	907 857	745 586	463 886	305 866	162 271	12 565	2	2
Atlanta, GA MSA	7 077	73 991	1 752 988	9 317 025	6 440 197	3 501 736	3 059 787	2 876 829	110 864	1	1
Austin–San Marcos, TX MSA	1 746	16 309	342 306	2 073 183	1 508 839	762 469	756 775	564 345	29 481	2	2
Birmingham, AL MSA	1 833	27 527	648 158	2 948 592	2 083 480	1 149 916	981 338	865 112	35 836	1	1
Boston–Worcester–Lawrence, MA–NH–ME–CT											
CMSA	12 243	81 838	2 373 923	10 850 651	7 795 632	4 779 944	3 171 595	3 055 019	114 237	1	1
Boston, MA–NH PMSA	6 890	49 004	1 486 300	7 345 622	5 037 835	3 091 565	2 036 809	2 307 788	63 841	1	1
Brockton, MA PMSA	545	3 110	82 089	306 915	253 477	165 924	94 379	53 437	3 003	4	3
Fitchburg–Leominster, MA PMSA	269	1 302	32 635	128 736	104 319	61 979	46 007	24 417	1 269	10	9
Lawrence, MA–NH PMSA	817	5 082	124 320	496 532	402 893	259 128	152 254	93 639	14 205	2	2
Lowell, MA–NH PMSA	711	4 158	107 067	528 670	419 261	238 826	188 724	109 408	9 495	3	4
Manchester, NH PMSA	504	3 407	87 906	396 764	286 943	157 297	137 693	109 821	4 018	5	5
Nashua, NH PMSA	359	2 564	69 678	304 805	209 941	135 141	90 245	94 864	2 972	3	3
New Bedford, MA PMSA	322	1 346	29 494	120 156	103 574	65 071	39 438	16 582	2 690	9	7
Portsmouth–Rochester, NH–ME PMSA	714	2 907	64 307	262 556	224 525	132 790	96 814	38 030	4 418	7	7
Worcester, MA–CT PMSA	1 112	8 958	290 127	959 896	752 864	472 223	289 233	207 032	8 326	3	3
Buffalo–Niagara Falls, NY MSA	2 770	19 882	511 310	2 223 494	1 731 257	1 044 741	721 901	492 237	29 018	1	1
Charlotte–Gastonia–Rock Hill, NC–SC MSA	3 507	35 793	820 669	3 891 328	2 727 292	1 524 019	1 258 910	1 164 036	62 675	1	1
Chicago–Gary–Kenosha, IL–IN–WI CMSA	17 461	168 121	5 399 233	22 184 439	16 162 846	10 365 237	6 228 715	6 021 593	279 047	1	1
Chicago, IL PMSA	15 745	150 021	4 872 634	20 279 362	14 635 290	9 343 621	5 695 384	5 644 072	248 879	1	1
Gary, IN PMSA	1 245	14 122	405 843	1 419 834	1 163 027	783 878	397 404	256 807	22 143	2	2
Kankakee, IL PMSA	(S)	1 854	58 314	220 555	175 810	123 380	56 394	44 745	5 023	8	5
Kenosha, WI PMSA	290	2 124	62 443	264 688	188 720	114 359	79 533	75 969	3 002	3	2
Cincinnati–Hamilton, OH–KY–IN CMSA	4 374	40 410	1 016 316	4 615 778	3 394 346	1 905 131	1 571 074	1 221 432	70 455	1	1
Cincinnati, OH–KY–IN PMSA	3 644	33 505	827 482	3 806 813	2 743 906	1 550 055	1 267 287	1 062 907	59 338	1	1
Hamilton–Middletown, OH PMSA	729	6 905	188 834	808 964	650 440	355 076	303 787	158 524	11 117	2	5
Cleveland–Akron, OH CMSA	6 239	53 328	1 556 441	6 843 617	4 795 471	3 002 804	1 997 121	2 048 146	103 597	1	1
Akron, OH PMSA	1 445	11 631	345 527	1 333 817	1 058 899	697 562	383 601	274 918	20 154	2	2
Cleveland–Lorain–Elyria, OH PMSA	4 794	41 697	1 210 914	5 509 800	3 736 572	2 305 242	1 613 520	1 773 228	83 443	1	1
Columbus, OH MSA	2 820	27 675	720 067	3 376 500	2 390 325	1 259 450	1 208 798	986 174	46 425	1	1
Dallas–Fort Worth, TX CMSA	7 346	75 712	1 808 507	10 203 729	7 364 560	4 201 252	3 269 393	2 839 169	109 355	1	1
Dallas, TX PMSA	4 803	53 793	1 317 671	7 583 678	5 336 924	3 039 904	2 366 551	2 246 754	69 543	1	1
Fort Worth–Arlington, TX PMSA	2 544	21 919	490 836	2 620 051	2 027 636	1 161 348	902 842	592 415	39 812	2	3
Dayton–Springfield, OH MSA	1 803	14 720	356 206	1 652 610	1 273 689	762 794	545 591	378 921	21 991	2	3
Denver–Boulder–Greeley, CO CMSA	5 285	51 513	1 322 039	7 207 403	4 878 447	2 814 076	2 145 095	2 328 955	108 587	1	1
Boulder–Longmont, CO PMSA	723	4 956	111 408	576 070	417 652	232 750	196 786	158 418	10 540	3	6
Denver, CO PMSA	4 285	42 844	1 104 777	5 624 658	3 848 563	2 221 228	1 693 715	1 776 095	89 801	1	1
Greeley, CO PMSA	276	3 714	105 854	1 006 674	612 232	360 099	254 594	394 442	8 247	4	2
Detroit–Ann Arbor–Flint, MI CMSA	10 438	76 874	2 131 851	9 476 778	6 939 844	4 087 119	3 032 361	2 536 934	133 165	1	1
Ann Arbor, MI PMSA	1 233	7 451	191 846	793 186	597 121	374 725	241 587	196 065	15 867	3	3
Detroit, MI PMSA	8 483	64 119	1 803 987	8 161 916	5 924 886	3 442 855	2 615 927	2 237 030	108 583	1	1
Flint, MI PMSA	722	5 305	136 018	521 677	417 837	269 539	174 846	103 840	8 715	5	5
Fresno, CA MSA	1 791	14 208	349 051	1 755 587	1 268 290	770 122	516 721	487 297	18 374	2	3
Grand Rapids–Muskegon–Holland, MI MSA	2 355	19 496	505 396	2 148 090	1 642 629	953 961	745 267	505 461	43 752	2	2
Greensboro–Winston-Salem–High Point, NC MSA	3 082	24 402	540 844	2 313 434	1 822 978	1 047 370	845 053	490 456	44 231	2	2
Greenville–Spartanburg–Anderson, SC MSA	2 152	22 186	496 148	1 956 687	1 434 867	806 058	654 458	521 821	30 887	2	2
Harrisburg–Lebanon–Carlisle, PA MSA	1 276	12 181	322 918	1 489 561	1 065 112	638 045	458 459	424 449	20 200	1	1
Hartford, CT MSA	3 091	22 380	696 481	2 814 684	2 209 178	1 477 782	774 787	605 506	35 949	1	1
Honolulu, HI MSA	1 545	25 559	912 346	3 903 203	2 842 568	1 722 723	1 199 077	1 060 635	50 195	1	1
Houston–Galveston–Brazoria, TX CMSA	6 291	119 211	3 205 270	12 654 430	9 514 180	6 042 982	4 042 609	3 140 250	177 366	1	1
Brazoria, TX PMSA	(S)	8 292	221 467	534 264	466 641	331 584	143 859	67 623	7 611	1	2
Galveston–Texas City, TX PMSA	338	2 875	71 484	286 893	231 890	148 032	86 817	55 004	6 311	3	5
Houston, TX PMSA	5 660	108 044	2 912 319	11 833 272	8 815 649	5 563 366	3 811 933	3 017 623	163 444	1	1
Indianapolis, IN MSA	3 519	37 349	961 491	4 200 995	3 227 731	1 870 117	1 425 913	973 263	56 951	1	1
Jacksonville, FL MSA	2 266	22 457	513 920	2 692 260	1 992 262	1 049 433	972 990	699 998	26 991	2	2
Kansas City, MO–KS MSA	4 037	37 512	941 580	4 126 782	3 085 130	1 805 277	1 364 250	1 041 652	79 702	1	2
Knoxville, TN MSA	1 376	15 294	357 428	1 647 147	1 124 913	626 588	516 938	522 234	26 935	2	2
Los Angeles–Riverside–Orange County, CA CMSA	25 024	228 224	6 252 722	28 494 254	20 459 711	12 903 124	8 061 167	8 034 543	250 903	(Z)	(Z)
Los Angeles–Long Beach, CA PMSA	12 214	107 774	3 102 870	14 053 438	9 847 071	6 400 955	3 705 758	4 206 367	110 354	1	1
Orange County, CA PMSA	5 346	63 974	1 727 156	8 238 752	5 761 760	3 622 397	2 295 327	2 476 992	51 968	1	1
Riverside–San Bernardino, CA PMSA	5 893	45 857	1 148 010	5 161 311	3 992 780	2 339 766	1 729 272	1 168 531	76 985	1	1
Ventura, CA PMSA	1 571	10 619	274 687	1 040 753	858 100	540 005	330 810	182 653	11 596	3	2
Louisville, KY–IN MSA	2 343	21 880	496 002	2 209 423	1 679 422	963 308	753 480	530 000	37 680	1	2
Memphis, TN–AR–MS MSA	1 747	19 165	443 617	2 079 965	1 568 485	853 852	740 772	511 480	32 711	1	2
Miami–Fort Lauderdale, FL CMSA	(S)	61 526	1 337 283	7 053 611	4 978 041	2 876 623	2 181 609	2 075 570	91 650	1	1
Fort Lauderdale, FL PMSA	3 565	28 171	638 317	3 242 896	2 326 973	1 333 169	1 030 560	915 923	44 618	2	1
Miami, FL PMSA	(S)	33 355	698 966	3 810 715	2 651 068	1 543 454	1 151 049	1 159 647	47 032	2	2
Milwaukee–Racine, WI CMSA	3 669	31 927	929 071	3 696 665	2 855 345	1 773 710	1 186 066	841 320	64 107	1	1
Milwaukee–Waukesha, WI PMSA	3 254	29 003	848 416	3 357 418	2 587 785	1 617 462	1 072 660	769 633	54 656	1	1
Racine, WI PMSA	415	2 924	80 654	339 248	267 560	156 248	113 406	71 687	9 450	2	2
Minneapolis–St. Paul, MN–WI MSA	6 022	57 068	1 746 540	8 585 142	5 752 252	3 678 458	2 286 669	2 832 890	121 034	2	1
Nashville, TN MSA	2 174	23 815	537 973	2 745 648	1 840 833	1 003 751	872 133	904 815	48 698	1	1
New Orleans, LA MSA	1 895	20 124	471 829	1 971 156	1 617 749	908 293	745 705	353 407	30 813	1	1

Table 15. Selected Statistics for Establishments With Payroll for Consolidated Metropolitan Statistical Areas and Selected Metropolitan Statistical Areas: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Capital expenditures, other than land	Relative standard error of estimate (percent) for column—	
										B	E
A	B	C	D	E	F	G	H	I	B	E	
New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA	42 350	293 351	9 218 472	37 414 756	28 282 143	18 392 725	10 662 353	9 132 613	369 395	(Z)	(Z)
Bergen–Passaic, NJ PMSA	3 805	27 827	877 468	3 341 538	2 675 177	1 825 453	968 390	666 362	32 405	1	1
Bridgeport, CT PMSA	1 032	5 940	178 098	698 909	529 942	347 931	194 890	168 967	8 091	3	3
Danbury, CT PMSA	710	3 255	98 901	453 931	324 836	195 875	133 634	129 095	6 059	4	4
Dutchess County, NY PMSA	742	4 096	114 520	489 015	375 227	231 309	156 061	113 789	6 023	5	6
Jersey City, NJ PMSA	776	5 896	188 387	674 560	558 706	369 589	196 350	115 854	5 989	3	3
Middlesex–Somerset–Hunterdon, NJ PMSA	2 765	19 015	604 438	2 620 186	2 000 280	1 247 470	789 895	619 906	29 971	1	2
Monmouth–Ocean, NJ PMSA	2 725	15 377	418 295	2 128 055	1 594 996	1 004 473	631 216	533 059	25 342	2	3
Nassau–Suffolk, NY PMSA	8 068	44 952	1 224 727	4 994 826	3 872 198	2 440 215	1 491 173	1 122 629	54 762	1	1
New Haven–Meriden, CT PMSA	1 351	9 080	282 141	1 101 261	864 400	532 933	350 990	236 861	(S)	3	2
New York, NY PMSA	12 358	109 208	3 729 636	14 477 032	10 612 957	7 104 953	3 877 610	3 864 074	119 089	1	1
Newark, NJ PMSA	4 737	30 728	994 606	3 889 810	3 123 797	2 026 165	1 151 210	766 012	46 706	1	1
Newburgh, NY–PA PMSA	1 035	3 891	101 839	415 465	350 342	206 446	146 555	65 123	6 561	3	4
Stamford–Norwalk, CT PMSA	987	6 211	183 104	1 076 075	620 111	355 313	276 985	455 964	(S)	2	3
Trenton, NJ PMSA	691	4 984	137 822	746 410	524 888	345 956	195 957	221 522	5 847	2	1
Waterbury, CT PMSA	569	2 891	84 490	307 681	254 285	158 646	101 436	53 396	4 683	6	6
Norfolk–Virginia Beach–Newport News, VA–NC MSA	3 475	31 916	661 209	3 264 139	2 370 699	1 311 542	1 107 870	893 440	37 724	1	2
Oklahoma City, OK MSA	1 940	14 947	323 667	1 524 928	1 133 645	633 963	526 892	391 283	29 083	2	2
Omaha, NE–IA MSA	1 793	14 711	354 345	1 933 644	1 465 442	809 972	683 552	468 202	29 574	2	2
Orlando, FL MSA	3 421	32 430	701 135	3 819 073	2 634 008	1 458 611	1 250 741	1 185 065	49 413	2	2
Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA	13 010	105 943	3 072 558	12 663 461	9 443 230	6 052 455	3 736 651	3 220 232	163 018	1	1
Atlantic–Cape May, NJ PMSA	1 032	6 001	176 618	722 675	591 515	367 391	239 927	131 160	7 973	2	2
Philadelphia, PA–NJ PMSA	10 203	84 254	2 477 200	10 256 615	7 564 572	4 872 495	2 991 358	2 692 042	128 446	1	1
Vineland–Millville–Bridgeton, NJ PMSA	311	1 891	52 851	224 524	178 191	115 784	65 657	46 332	(S)	4	3
Wilmington–Newark, DE–MD PMSA	1 464	13 797	365 890	1 459 648	1 108 951	696 784	439 709	350 697	23 149	1	1
Phoenix–Mesa, AZ MSA	4 906	60 139	1 384 878	7 634 431	4 873 332	2 893 556	2 060 685	2 761 099	84 556	1	1
Pittsburgh, PA MSA	5 518	54 910	1 458 387	6 331 124	4 682 231	3 014 743	1 804 254	1 648 893	79 794	1	1
Portland–Salem, OR–WA CMSA	4 992	35 531	972 261	4 394 064	3 201 258	1 905 477	1 362 160	1 192 806	64 561	1	2
Portland–Vancouver, OR–WA PMSA	4 992	35 531	972 261	4 394 064	3 201 258	1 905 477	1 362 160	1 192 806	64 561	1	2
Salem, OR PMSA	969	5 380	126 038	678 261	495 596	274 806	226 619	182 665	7 893	5	7
Providence–Fall River–Warwick, RI–MA MSA	3 085	15 423	395 978	1 984 282	1 394 678	850 380	588 115	589 604	21 873	1	1
Raleigh–Durham–Chapel Hill, NC MSA	2 812	22 388	472 491	2 356 262	1 754 111	970 371	810 399	602 151	27 578	2	2
Richmond–Petersburg, VA MSA	2 951	26 400	595 052	2 454 846	1 913 486	1 142 623	821 860	541 360	33 222	1	3
Rochester, NY MSA	2 450	18 015	472 607	2 103 105	1 579 430	891 385	730 158	523 675	25 002	1	1
Sacramento–Yolo, CA CMSA	4 518	32 230	845 404	4 164 981	2 936 657	1 817 002	1 172 578	1 228 324	43 810	1	1
Sacramento, CA PMSA	4 190	29 291	758 919	3 782 138	2 656 758	1 632 443	1 067 355	1 125 380	39 610	1	1
Yolo, CA PMSA	(S)	2 939	86 485	382 843	279 899	184 559	105 223	102 944	4 200	6	4
St. Louis, MO–IL MSA	6 082	55 365	1 548 072	6 937 162	4 977 510	3 106 041	2 055 513	1 959 652	99 753	1	1
Salt Lake City–Ogden, UT MSA	2 707	23 990	560 317	2 772 085	1 898 262	1 105 519	857 348	873 823	55 838	2	1
San Antonio, TX MSA	2 166	30 050	702 500	2 953 852	2 217 933	1 432 349	814 910	735 918	53 106	1	2
San Diego, CA MSA	5 403	44 236	1 186 333	5 408 127	3 724 569	2 197 678	1 599 659	1 683 559	62 305	1	1
San Francisco–Oakland–San Jose, CA CMSA	15 698	128 595	4 068 869	17 428 806	12 511 463	7 858 635	4 871 350	4 917 343	173 593	1	(Z)
Oakland, CA PMSA	4 826	47 115	1 459 370	6 003 820	4 531 721	2 869 445	1 756 361	1 472 099	72 828	1	1
San Francisco, CA PMSA	4 023	31 926	1 081 787	4 900 565	3 088 978	1 953 622	1 191 790	1 811 587	36 025	1	1
San Jose, CA PMSA	3 161	27 930	934 351	3 905 159	2 860 273	1 793 802	1 104 117	1 044 885	33 009	1	1
Santa Cruz–Watsonville, CA PMSA	864	3 638	82 819	380 062	288 820	165 875	128 350	91 242	5 547	3	3
Santa Rosa, CA PMSA	1 707	9 102	241 046	1 143 887	881 009	529 602	369 143	262 879	10 563	3	3
Vallejo–Fairfield–Napa, CA PMSA	1 118	8 884	269 495	1 095 313	860 662	546 288	321 589	234 651	15 620	2	2
Scranton–Wilkes-Barre–Hazleton, PA MSA	1 614	8 699	206 050	825 138	681 573	416 091	284 099	143 566	15 042	3	3
Seattle–Tacoma–Bremerton, WA CMSA	10 669	82 634	2 384 821	10 963 886	7 917 400	4 754 065	3 444 067	3 046 486	141 175	1	1
Bremerton, WA PMSA	748	3 085	67 790	300 877	246 432	137 917	119 730	54 445	5 474	7	6
Olympia, WA PMSA	684	2 933	61 822	369 192	276 311	156 988	130 032	92 882	4 326	8	12
Seattle–Bellevue–Everett, WA PMSA	7 339	64 690	1 946 200	8 991 018	6 413 274	3 827 314	2 805 788	2 577 744	105 157	1	1
Tacoma, WA PMSA	1 897	11 925	309 008	1 302 799	981 384	631 845	388 518	321 416	26 217	2	2
Springfield, MA MSA	1 097	7 327	196 552	797 567	610 990	374 067	267 688	186 577	12 438	3	2
Syracuse, NY MSA	1 867	13 795	360 508	1 536 864	1 176 248	733 609	475 554	360 616	18 523	2	2
Tampa–St. Petersburg–Clearwater, FL MSA	4 773	39 916	809 754	4 242 494	3 067 607	1 688 212	1 442 645	1 174 887	56 136	1	1
Toledo, OH MSA	1 229	12 804	357 920	1 443 111	1 077 502	628 147	486 554	365 609	14 825	1	1
Tucson, AZ MSA	1 377	15 722	324 667	1 674 030	1 190 464	783 248	438 735	483 565	23 672	2	1
Tulsa, OK MSA	1 508	14 756	355 817	1 497 279	1 158 912	713 020	462 646	338 367	26 505	2	2
Washington–Baltimore, DC–MD–VA–WV CMSA ...	17 387	176 268	4 603 770	20 018 974	14 144 696	8 669 507	6 022 675	5 874 278	192 779	1	1
Baltimore, MD PMSA	6 647	59 167	1 447 718	6 196 218	4 592 118	2 854 549	1 975 464	1 604 100	74 913	1	1
Hagerstown, MD PMSA	347	3 026	65 872	283 106	206 110	114 847	98 262	76 996	3 806	5	5
Washington, DC–MD–VA–WV PMSA	10 393	114 075	3 090 179	13 539 649	9 346 467	5 700 111	3 948 948	4 193 182	114 060	1	1
West Palm Beach–Boca Raton, FL MSA	2 934	21 281	459 936	2 300 232	1 713 403	941 927	809 112	586 829	21 415	2	2
Youngstown–Warren, OH MSA	1 284	9 877	238 267	965 323	754 839	472 183	335 409	210 484	14 093	2	2

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/ structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Appendix D.

Metropolitan Areas

[Titles and definitions shown for MSA's, CMSA's, and PMSA's are those established by the Office of Management and Budget as of June 30, 1993]

Abilene, TX MSA

Taylor County, TX

Akron, OH PMSA—see Cleveland–Akron, OH CMSA

Albany, GA MSA

Dougherty County, GA
Lee County, GA

Albany–Schenectady–Troy, NY MSA

Albany County, NY
Montgomery County, NY
Rensselaer County, NY
Saratoga County, NY
Schenectady County, NY
Schoharie County, NY

Albuquerque, NM MSA

Bernalillo County, NM
Sandoval County, NM
Valencia County, NM

Alexandria, LA MSA

Rapides Parish, LA

Allentown–Bethlehem–Easton, PA MSA

Carbon County, PA
Lehigh County, PA
Northampton County, PA

Altoona, PA MSA

Blair County, PA

Amarillo, TX MSA

Potter County, TX
Randall County, TX

Anchorage, AK MSA

Anchorage Borough, AK

Ann Arbor, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Anniston, AL MSA

Calhoun County, AL

Appleton–Oshkosh–Neenah, WI MSA

Calumet County, WI
Outagamie County, WI
Winnebago County, WI

Asheville, NC MSA

Buncombe County, NC
Madison County, NC

Athens, GA MSA

Clarke County, GA
Madison County, GA
Oconee County, GA

Atlanta, GA MSA

Barrow County, GA
Bartow County, GA

Atlanta, GA MSA—Con.

Carroll County, GA
Cherokee County, GA
Clayton County, GA
Cobb County, GA
Coweta County, GA
DeKalb County, GA
Douglas County, GA
Fayette County, GA
Forsyth County, GA
Fulton County, GA
Gwinnett County, GA
Henry County, GA
Newton County, GA
Paulding County, GA
Pickens County, GA
Rockdale County, GA
Spalding County, GA
Walton County, GA

Atlantic–Cape May, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Augusta–Aiken, GA–SC MSA

Columbia County, GA
McDuffie County, GA
Richmond County, GA
Aiken County, SC
Edgefield County, SC

Austin–San Marcos, TX MSA

Bastrop County, TX
Caldwell County, TX
Hays County, TX
Travis County, TX
Williamson County, TX

Bakersfield, CA MSA

Kern County, CA

Baltimore, MD PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA

Bangor, ME MSA

Penobscot County, ME (part)
Bangor city, ME
Brewer city, ME
Eddington town, ME
Glenburn town, ME
Hampden town, ME
Hermon town, ME
Holden town, ME
Kenduskeag town, ME
Milford town, ME
Old Town city, ME
Orono town, ME
Orrington town, ME
Penobscot Indian Island Reservation, ME
Veazie town, ME

Bangor, ME MSA—Con.

Waldo County, ME (part)
Winterport town, ME

Barnstable–Yarmouth, MA MSA

Barnstable County, MA (part)
Barnstable city, MA
Brewster town, MA
Chatham town, MA
Dennis town, MA
Eastham town, MA
Harwich town, MA
Mashpee town, MA
Orleans town, MA
Sandwich town, MA
Yarmouth town, MA

Baton Rouge, LA MSA

Ascension Parish, LA
East Baton Rouge Parish, LA
Livingston Parish, LA
West Baton Rouge Parish, LA

Beaumont–Port Arthur, TX MSA

Hardin County, TX
Jefferson County, TX
Orange County, TX

Bellingham, WA MSA

Whatcom County, WA

Benton Harbor, MI MSA

Berrien County, MI

Bergen–Passaic, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Billings, MT MSA

Yellowstone County, MT

Biloxi–Gulfport–Pascagoula, MS MSA

Hancock County, MS
Harrison County, MS
Jackson County, MS

Binghamton, NY MSA

Broome County, NY
Tioga County, NY

Birmingham, AL MSA

Blount County, AL
Jefferson County, AL
St. Clair County, AL
Shelby County, AL

Bismarck, ND MSA

Burleigh County, ND
Morton County, ND

Bloomington, IN MSA

Monroe County, IN

Bloomington–Normal, IL MSA

McLean County, IL

Boise City, ID MSA

Ada County, ID

Canyon County, ID

**Boston, MA–NH PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA**

Boston, MA–NH PMSA

Bristol County, MA (part)

Berkley town, MA

Dighton town, MA

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Essex town, MA

Gloucester city, MA

Hamilton town, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Manchester town, MA

Marblehead town, MA

Middleton town, MA

Nahant town, MA

Newbury town, MA

Newburyport city, MA

Peabody city, MA

Rockport town, MA

Rowley town, MA

Salem city, MA

Salisbury town, MA

Saugus town, MA

Swampscott town, MA

Topsfield town, MA

Wenham town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Holliston town, MA

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Lincoln town, MA

Littleton town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Sherborn town, MA

Shirley town, MA

Somerville city, MA

Stoneham town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Middlesex County, MA (part)

Stow town, MA

Sudbury town, MA

Townsend town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

Winchester town, MA

Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Cohasset town, MA

Dedham town, MA

Dover town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Millis town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Plainville town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Norwell town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

Suffolk County, MA

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA

Blackstone town, MA

Bolton town, MA

Harvard town, MA

Hopedale town, MA

Lancaster town, MA

Mendon town, MA

Milford town, MA

Millville town, MA

Southborough town, MA

Upton town, MA

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Boston, MA–NH PMSA—Con.

Rockingham County, NH (part)

Seabrook town, NH

South Hampton town, NH

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Halifax town, MA

Hanson town, MA

Lakeville town, MA

Middleborough town, MA

Plympton town, MA

West Bridgewater town, MA

Whitman town, MA

Fitchburg–Leominster, MA PMSA

Middlesex County, MA (part)

Ashby town, MA

Worcester County, MA (part)

Ashburnham town, MA

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lunenburg town, MA

Templeton town, MA

Westminster town, MA

Winchendon town, MA

Lawrence, MA–NH PMSA

Essex County, MA (part)

Andover town, MA

Boxford town, MA

Georgetown town, MA

Groveland town, MA

Haverhill city, MA

Lawrence city, MA

Merrimac town, MA

Methuen city, MA

North Andover town, MA

West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH

Chester town, NH

Danville town, NH

Derry town, NH

Fremont town, NH

Hampstead town, NH

Kingston town, NH

Newton town, NH

Plaistow town, NH

Raymond town, NH

Salem town, NH

Sandown town, NH

Windham town, NH

Lowell, MA–NH PMSA

Middlesex County, MA (part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Dunstable town, MA

Groton town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Tyngsborough town, MA

Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Manchester, NH PMSA
 Hillsborough County, NH (part)
 Bedford town, NH
 Goffstown town, NH
 Manchester city, NH
 Weare town, NH
 Merrimack County, NH (part)
 Allentown town, NH
 Hooksett town, NH
 Rockingham County, NH (part)
 Auburn town, NH
 Candia town, NH
 Londonderry town, NH
 Nashua, NH PMSA
 Hillsborough County, NH (part)
 Amherst town, NH
 Brookline town, NH
 Greenville town, NH
 Hollis town, NH
 Hudson town, NH
 Litchfield town, NH
 Mason town, NH
 Merrimack town, NH
 Milford town, NH
 Mont Vernon town, NH
 Nashua city, NH
 New Ipswich town, NH
 Wilton town, NH
 New Bedford, MA PMSA
 Bristol County, MA (part)
 Acushnet town, MA
 Dartmouth town, MA
 Fairhaven town, MA
 Freetown town, MA
 New Bedford city, MA
 Plymouth County, MA (part)
 Marion town, MA
 Mattapoisett town, MA
 Rochester town, MA
 Portsmouth–Rochester, NH–ME PMSA
 York County, ME (part)
 Berwick town, ME
 Eliot town, ME
 Kittery town, ME
 South Berwick town, ME
 York town, ME
 Rockingham County, NH (part)
 Brentwood town, NH
 East Kingston town, NH
 Epping town, NH
 Exeter town, NH
 Greenland town, NH
 Hampton town, NH
 Hampton Falls town, NH
 Kensington town, NH
 New Castle town, NH
 Newfields town, NH
 Newington town, NH
 Newmarket town, NH
 North Hampton town, NH
 Portsmouth city, NH
 Rye town, NH
 Stratham town, NH
 Strafford County, NH (part)
 Barrington town, NH
 Dover city, NH
 Durham town, NH
 Farmington town, NH
 Lee town, NH
 Madbury town, NH
 Milton town, NH
 Rochester city, NH
 Rollinsford town, NH
 Somersworth city, NH

**Boston–Worcester–Lawrence, MA–NH–ME–CT
CMSA—Con.**

Worcester, MA–CT PMSA
 Windham County, CT (part)
 Thompson town, CT
 Hampden County, MA (part)
 Holland town, MA
 Worcester County, MA (part)
 Auburn town, MA
 Barre town, MA
 Boylston town, MA
 Brookfield town, MA
 Charlton town, MA
 Clinton town, MA
 Douglas town, MA
 Dudley town, MA
 East Brookfield town, MA
 Grafton town, MA
 Holden town, MA
 Leicester town, MA
 Millbury town, MA
 Northborough town, MA
 Northbridge town, MA
 North Brookfield town, MA
 Oakham town, MA
 Oxford town, MA
 Paxton town, MA
 Princeton town, MA
 Rutland town, MA
 Shrewsbury town, MA
 Southbridge town, MA
 Spencer town, MA
 Sterling town, MA
 Sturbridge town, MA
 Sutton town, MA
 Uxbridge town, MA
 Webster town, MA
 Westborough town, MA
 West Boylston town, MA
 West Brookfield town, MA
 Worcester city, MA

**Boulder–Longmont, CO PMSA—see
Denver–Boulder–Greeley, CO CMSA****Brazoria, TX PMSA—see Houston–
Galveston–Brazoria, TX CMSA****Bremerton, WA PMSA—see Seattle–
Tacoma–Bremerton, WA CMSA****Bridgeport, CT PMSA—see New York–
Northern New Jersey–Long Island, NY–
NJ–CT–PA CMSA****Brockton, MA PMSA—see Boston–
Worcester–Lawrence, MA–NH–ME–CT CMSA****Brownsville–Harlingen–San Benito, TX MSA**
Cameron County, TX**Bryan–College Station, TX MSA**
Brazos County, TX**Buffalo–Niagara Falls, NY MSA**
Erie County, NY
Niagara County, NY

Burlington, VT MSA
 Chittenden County, VT (part)
 Burlington city, VT
 Charlotte town, VT
 Colchester town, VT
 Essex Junction village, VT
 Essex town balance, VT
 Hinesburg town, VT
 Jericho town, VT
 Jericho village, VT
 Milton town, VT
 Milton village, VT
 Richmond town, VT
 St. George town, VT
 Shelburne town, VT

Burlington, VT MSA—Con.
 Chittenden County, VT (part)—Con.
 South Burlington city, VT
 Williston town, VT
 Winooski city, VT
 Franklin County, VT (part)
 Fairfax town, VT
 Georgia town, VT
 St. Albans city, VT
 St. Albans town, VT
 Swanton town, VT
 Swanton village, VT
 Grand Isle County, VT (part)
 Grand Isle town, VT
 South Hero town, VT

Canton–Massillon, OH MSA
Carroll County, OH
Stark County, OH**Casper, WY MSA**
Natrona County, WY**Cedar Rapids, IA MSA**
Linn County, IA**Champaign–Urbana, IL MSA**
Champaign County, IL**Charleston–North Charleston, SC MSA**
Berkeley County, SC
Charleston County, SC
Dorchester County, SC**Charleston, WV MSA**
Kanawha County, WV
Putnam County, WV**Charlotte–Gastonia–Rock Hill, NC–SC MSA**
Cabarrus County, NC
Gaston County, NC
Lincoln County, NC
Mecklenburg County, NC
Rowan County, NC
Union County, NC
York County, SC**Charlottesville, VA MSA**
Albemarle County, VA
Fluvanna County, VA
Greene County, VA
Charlottesville city, VA**Chattanooga, TN–GA MSA**
Catoosa County, GA
Dade County, GA
Walker County, GA
Hamilton County, TN
Marion County, TN**Cheyenne, WY MSA**
Laramie County, WY**Chicago, IL PMSA—see Chicago–Gary–
Kenosha, IL–IN–WI CMSA**

Chicago–Gary–Kenosha, IL–IN–WI CMSA
 Chicago, IL PMSA
 Cook County, IL
 DeKalb County, IL
 DuPage County, IL
 Grundy County, IL
 Kane County, IL
 Kendall County, IL
 Lake County, IL
 McHenry County, IL
 Will County, IL
 Gary, IN PMSA
 Lake County, IN
 Porter County, IN
 Kankakee, IL PMSA
 Kankakee County, IL

Chicago–Gary–Kenosha, IL–IN–WI CMSA—Con.

Kenosha, WI PMSA
Kenosha County, WI

Chico–Paradise, CA MSA

Butte County, CA

Cincinnati, OH–KY–IN PMSA—see

Cincinnati–Hamilton, OH–KY–IN CMSA

Cincinnati–Hamilton, OH–KY–IN CMSA

Cincinnati, OH–KY–IN PMSA
Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH
Hamilton–Middletown, OH PMSA
Butler County, OH

Clarksville–Hopkinsville, TN–KY MSA

Christian County, KY
Montgomery County, TN

Cleveland–Lorain–Elyria, OH PMSA—see

Cleveland–Akron, OH CMSA

Cleveland–Akron, OH CMSA

Akron, OH PMSA
Portage County, OH
Summit County, OH
Cleveland–Lorain–Elyria, OH PMSA
Ashtabula County, OH
Cuyahoga County, OH
Geauga County, OH
Lake County, OH
Lorain County, OH
Medina County, OH

Colorado Springs, CO MSA

El Paso County, CO

Columbia, MO MSA

Boone County, MO

Columbia, SC MSA

Lexington County, SC
Richland County, SC

Columbus, GA–AL MSA

Russell County, AL
Chattahoochee County, GA
Harris County, GA
Muscogee County, GA

Columbus, OH MSA

Delaware County, OH
Fairfield County, OH
Franklin County, OH
Licking County, OH
Madison County, OH
Pickaway County, OH

Corpus Christi, TX MSA

Nueces County, TX
San Patricio County, TX

Cumberland, MD–WV MSA

Allegany County, MD
Mineral County, WV

Dallas, TX PMSA—see Dallas–Fort Worth, TX CMSA

Dallas–Fort Worth, TX CMSA

Dallas, TX PMSA
Collin County, TX
Dallas County, TX
Denton County, TX
Ellis County, TX
Henderson County, TX
Hunt County, TX
Kaufman County, TX
Rockwall County, TX
Fort Worth–Arlington, TX PMSA
Hood County, TX
Johnson County, TX
Parker County, TX
Tarrant County, TX

Danbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Danville, VA MSA

Pittsylvania County, VA
Danville city, VA

Davenport–Moline–Rock Island, IA–IL MSA

Henry County, IL
Rock Island County, IL
Scott County, IA

Dayton–Springfield, OH MSA

Clark County, OH
Greene County, OH
Miami County, OH
Montgomery County, OH

Daytona Beach, FL MSA

Flagler County, FL
Volusia County, FL

Decatur, AL MSA

Lawrence County, AL
Morgan County, AL

Decatur, IL MSA

Macon County, IL

Denver, CO PMSA—see Denver–Boulder–Greeley, CO CMSA

Denver–Boulder–Greeley, CO CMSA

Boulder–Longmont, CO PMSA
Boulder County, CO
Denver, CO PMSA
Adams County, CO
Arapahoe County, CO
Denver County, CO
Douglas County, CO
Jefferson County, CO
Greeley, CO PMSA
Weld County, CO

Des Moines, IA MSA

Dallas County, IA
Polk County, IA
Warren County, IA

Detroit, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Detroit–Ann Arbor–Flint, MI CMSA

Ann Arbor, MI PMSA
Lenawee County, MI
Livingston County, MI
Washtenaw County, MI
Detroit, MI PMSA
Lapeer County, MI
Macomb County, MI
Monroe County, MI
Oakland County, MI
St. Clair County, MI
Wayne County, MI

Detroit–Ann Arbor–Flint, MI CMSA—Con.

Flint, MI PMSA
Genesee County, MI

Dothan, AL MSA

Dale County, AL
Houston County, AL

Dover, DE MSA

Kent County, DE

Dubuque, IA MSA

Dubuque County, IA

Duluth–Superior, MN–WI MSA

St. Louis County, MN
Douglas County, WI

Dutchess County, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Eau Claire, WI MSA

Chippewa County, WI
Eau Claire County, WI

El Paso, TX MSA

El Paso County, TX

Elkhart–Goshen, IN MSA

Elkhart County, IN

Elmira, NY MSA

Chemung County, NY

Enid, OK MSA

Garfield County, OK

Erie, PA MSA

Erie County, PA

Eugene–Springfield, OR MSA

Lane County, OR

Evansville–Henderson, IN–KY MSA

Posey County, IN
Vanderburgh County, IN
Warrick County, IN
Henderson County, KY

Fargo–Moorhead, ND–MN MSA

Clay County, MN
Cass County, ND

Fayetteville, NC MSA

Cumberland County, NC

Fayetteville–Springdale–Rogers, AR MSA

Benton County, AR
Washington County, AR

Fitchburg–Leominster, MA PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Flint, MI PMSA—see Detroit–Ann Arbor–Flint, MI CMSA

Florence, AL MSA

Colbert County, AL
Lauderdale County, AL

Florence, SC MSA

Florence County, SC

Fort Collins–Loveland, CO MSA

Larimer County, CO

Fort Lauderdale, FL PMSA—see Miami–Fort Lauderdale, FL CMSA

Fort Myers–Cape Coral, FL MSA

Lee County, FL

Fort Pierce–Port St. Lucie, FL MSA

Martin County, FL
St. Lucie County, FL

Fort Smith, AR—OK MSA

Crawford County, AR
Sebastian County, AR
Sequoyah County, OK

Fort Walton Beach, FL MSA

Okaloosa County, FL

Fort Wayne, IN MSA

Adams County, IN
Allen County, IN
De Kalb County, IN
Huntington County, IN
Wells County, IN
Whitley County, IN

Fort Worth—Arlington, TX PMSA—see

Dallas—Fort Worth, TX CMSA

Fresno, CA MSA

Fresno County, CA
Madera County, CA

Gadsden, AL MSA

Etowah County, AL

Gainesville, FL MSA

Alachua County, FL

Galveston—Texas City, TX PMSA—see

Houston—Galveston—Brazoria, TX CMSA

Gary, IN PMSA—see Chicago—Gary—

Kenosha, IL—IN—WI CMSA

Glens Falls, NY MSA

Warren County, NY
Washington County, NY

Goldsboro, NC MSA

Wayne County, NC

Grand Forks, ND—MN MSA

Polk County, MN
Grand Forks County, ND

Grand Rapids—Muskegon—Holland, MI MSA

Allegan County, MI
Kent County, MI
Muskegon County, MI
Ottawa County, MI

Great Falls, MT MSA

Cascade County, MT

Greeley, CO PMSA—see Denver—Boulder—

Greeley, CO CMSA

Green Bay, WI MSA

Brown County, WI

Greensboro—Winston-Salem—High Point, NC MSA

Alamance County, NC
Davidson County, NC
Davie County, NC
Forsyth County, NC
Guilford County, NC
Randolph County, NC
Stokes County, NC
Yadkin County, NC

Greenville, NC MSA

Pitt County, NC

Greenville—Spartanburg—Anderson, SC MSA

Anderson County, SC
Cherokee County, SC
Greenville County, SC
Pickens County, SC
Spartanburg County, SC

Hagerstown, MD PMSA—see Washington—

Baltimore, DC—MD—VA—WV CMSA

Hamilton—Middletown, OH PMSA—see
Cincinnati—Hamilton, OH—KY—IN CMSA

Harrisburg—Lebanon—Carlisle, PA MSA

Cumberland County, PA
Dauphin County, PA
Lebanon County, PA
Perry County, PA

Hartford, CT MSA

Hartford County, CT (part)
Avon town, CT
Berlin town, CT
Bloomfield town, CT
Bristol city, CT
Burlington town, CT
Canton town, CT
East Granby town, CT
East Hartford town, CT
East Windsor town, CT
Enfield town, CT
Farmington town, CT
Glastonbury town, CT
Granby town, CT
Hartford city, CT
Manchester town, CT
Marlborough town, CT
New Britain city, CT
Newington town, CT
Plainville town, CT
Rocky Hill town, CT
Simsbury town, CT
Southington town, CT
South Windsor town, CT
Suffield town, CT
West Hartford town, CT
Wethersfield town, CT
Windsor town, CT
Windsor Locks town, CT

Litchfield County, CT (part)
Barkhamsted town, CT
Harwinton town, CT
New Hartford town, CT
Plymouth town, CT
Winchester town, CT

Middlesex County, CT (part)
Cromwell town, CT
Durham town, CT
East Haddam town, CT
East Hampton town, CT
Haddam town, CT
Middlefield town, CT
Middletown city, CT
Portland town, CT

New London County, CT (part)
Colchester town, CT
Lebanon town, CT

Tolland County, CT (part)
Andover town, CT
Bolton town, CT
Columbia town, CT
Coventry town, CT
Ellington town, CT
Hebron town, CT
Mansfield town, CT
Somers town, CT
Stafford town, CT
Tolland town, CT
Vernon town, CT
Willington town, CT

Windham County, CT (part)
Ashford town, CT
Chaplin town, CT
Windham town, CT

Hickory—Morganton, NC MSA

Alexander County, NC
Burke County, NC
Caldwell County, NC
Catawba County, NC

Honolulu, HI MSA

Honolulu County, HI

Houma, LA MSA

Lafourche Parish, LA
Terrebonne Parish, LA

Houston, TX PMSA—see Houston—Galveston—Brazoria, TX CMSA

Houston—Galveston—Brazoria, TX CMSA

Brazoria, TX PMSA
Brazoria County, TX
Galveston—Texas City, TX PMSA
Galveston County, TX
Houston, TX PMSA
Chambers County, TX
Fort Bend County, TX
Harris County, TX
Liberty County, TX
Montgomery County, TX
Waller County, TX

Huntington—Ashland, WV—KY—OH MSA

Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Huntsville, AL MSA

Limestone County, AL
Madison County, AL

Indianapolis, IN MSA

Boone County, IN
Hamilton County, IN
Hancock County, IN
Hendricks County, IN
Johnson County, IN
Madison County, IN
Marion County, IN
Morgan County, IN
Shelby County, IN

Iowa City, IA MSA

Johnson County, IA

Jackson, MI MSA

Jackson County, MI

Jackson, MS MSA

Hinds County, MS
Madison County, MS
Rankin County, MS

Jackson, TN MSA

Madison County, TN

Jacksonville, FL MSA

Clay County, FL
Duval County, FL
Nassau County, FL
St. Johns County, FL

Jacksonville, NC MSA

Onslow County, NC

Jamestown, NY MSA

Chautauqua County, NY

Janesville—Beloit, WI MSA

Rock County, WI

Jersey City, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Johnson City–Kingsport–Bristol, TN–VA MSA

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol city, VA

Johnstown, PA MSA

Cambria County, PA
Somerset County, PA

Joplin, MO MSA

Jasper County, MO
Newton County, MO

Kalamazoo–Battle Creek, MI MSA

Calhoun County, MI
Kalamazoo County, MI
Van Buren County, MI

Kankakee, IL PMSA—see Chicago–Gary–Kenosha, IL–IN–WI CMSA

Kansas City, MO–KS MSA

Johnson County, KS
Leavenworth County, KS
Miami County, KS
Wyandotte County, KS
Cass County, MO
Clay County, MO
Clinton County, MO
Jackson County, MO
Lafayette County, MO
Platte County, MO
Ray County, MO

Kenosha, WI PMSA—see Chicago–Gary–Kenosha, IL–IN–WI CMSA

Killeen–Temple, TX MSA

Bell County, TX
Coryell County, TX

Knoxville, TN MSA

Anderson County, TN
Blount County, TN
Knox County, TN
Loudon County, TN
Sevier County, TN
Union County, TN

Kokomo, IN MSA

Howard County, IN
Tipton County, IN

La Crosse, WI–MN MSA

Houston County, MN
La Crosse County, WI

Lafayette, LA MSA

Acadia Parish, LA
Lafayette Parish, LA
St. Landry Parish, LA
St. Martin Parish, LA

Lafayette, IN MSA

Clinton County, IN
Tippecanoe County, IN

Lake Charles, LA MSA

Calcasieu Parish, LA

Lakeland–Winter Haven, FL MSA

Polk County, FL

Lancaster, PA MSA

Lancaster County, PA

Lansing–East Lansing, MI MSA

Clinton County, MI
Eaton County, MI
Ingham County, MI

Laredo, TX MSA

Webb County, TX

Las Cruces, NM MSA

Dona Ana County, NM

Las Vegas, NV–AZ MSA

Mohave County, AZ
Clark County, NV
Nye County, NV

Lawrence, KS MSA

Douglas County, KS

Lawrence, MA–NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Lawton, OK MSA

Comanche County, OK

Lewiston–Auburn, ME MSA

Androscoggin County, ME (part)
Auburn city, ME
Greene town, ME
Lewiston city, ME
Lisbon town, ME
Mechanic Falls town, ME
Poland town, ME
Sabattus town, ME
Turner town, ME
Wales town, ME

Lexington, KY MSA

Bourbon County, KY
Clark County, KY
Fayette County, KY
Jessamine County, KY
Madison County, KY
Scott County, KY
Woodford County, KY

Lima, OH MSA

Allen County, OH
Auglaize County, OH

Lincoln, NE MSA

Lancaster County, NE

Little Rock–North Little Rock, AR MSA

Faulkner County, AR
Lonoke County, AR
Pulaski County, AR
Saline County, AR

Longview–Marshall, TX MSA

Gregg County, TX
Harrison County, TX
Upshur County, TX

Los Angeles–Riverside–Orange County, CA CMSA

Los Angeles–Long Beach, CA PMSA
Los Angeles County, CA
Orange County, CA PMSA
Orange County, CA
Riverside–San Bernardino, CA PMSA
Riverside County, CA
San Bernardino County, CA
Ventura, CA PMSA
Ventura County, CA

Los Angeles–Long Beach, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Louisville, KY–IN MSA

Clark County, IN
Floyd County, IN
Harrison County, IN
Scott County, IN
Bullitt County, KY
Jefferson County, KY
Oldham County, KY

Lowell, MA–NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Lubbock, TX MSA

Lubbock County, TX

Lynchburg, VA MSA

Amherst County, VA
Bedford County, VA
Campbell County, VA
Bedford city, VA
Lynchburg city, VA

Macon, GA MSA

Bibb County, GA
Houston County, GA
Jones County, GA
Peach County, GA
Twiggs County, GA

Madison, WI MSA

Dane County, WI

Manchester, NH PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Mansfield, OH MSA

Crawford County, OH
Richland County, OH

McAllen–Edinburg–Mission, TX MSA

Hidalgo County, TX

Medford–Ashland, OR MSA

Jackson County, OR

Melbourne–Titusville–Palm Bay, FL MSA

Brevard County, FL

Memphis, TN–AR–MS MSA

Crittenden County, AR
DeSoto County, MS
Fayette County, TN
Shelby County, TN
Tipton County, TN

Merced, CA MSA

Merced County, CA

Miami–Fort Lauderdale, FL CMSA

Fort Lauderdale, FL PMSA
Broward County, FL
Miami, FL PMSA
Dade County, FL

Miami, FL PMSA—see Miami–Fort Lauderdale, FL CMSA

Middlesex–Somerset–Hunterdon, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Milwaukee–Waukesha, WI PMSA—see Milwaukee–Racine, WI CMSA

Milwaukee–Racine, WI CMSA

Milwaukee–Waukesha, WI PMSA
Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI

Milwaukee–Racine, WI CMSA—Con.

Racine, WI PMSA
Racine County, WI

Minneapolis–St. Paul, MN–WI MSA

Anoka County, MN
Carver County, MN
Chisago County, MN
Dakota County, MN
Hennepin County, MN
Isanti County, MN
Ramsey County, MN
Scott County, MN
Sherburne County, MN
Washington County, MN
Wright County, MN
Pierce County, WI
St. Croix County, WI

Mobile, AL MSA

Baldwin County, AL
Mobile County, AL

Modesto, CA MSA

Stanislaus County, CA

Monmouth–Ocean, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Monroe, LA MSA**

Ouachita Parish, LA

Montgomery, AL MSA

Autauga County, AL
Elmore County, AL
Montgomery County, AL

Muncie, IN MSA

Delaware County, IN

Myrtle Beach, SC MSA

Horry County, SC

Naples, FL MSA

Collier County, FL

Nashua, NH PMSA—see Boston–**Worcester–Lawrence, MA–NH–ME–CT CMSA****Nashville, TN MSA**

Cheatham County, TN
Davidson County, TN
Dickson County, TN
Robertson County, TN
Rutherford County, TN
Sumner County, TN
Williamson County, TN
Wilson County, TN

Nassau–Suffolk, NY PMSA—see New**York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New Bedford, MA PMSA—see Boston–****Worcester–Lawrence, MA–NH–ME–CT CMSA****New Haven–Meriden, CT PMSA—see New****York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****New London–Norwich, CT–RI MSA**

Middlesex County, CT (part)
Fenwick borough, CT
Old Saybrook town, CT
New London County, CT (part)
Bozrah town, CT
East Lyme town, CT
Franklin town, CT
Griswold town balance, CT
Groton city, CT
Groton town balance, CT

New London–Norwich, CT–RI MSA—Con.

New London County, CT (part)—Con.
Groton Long Point borough, CT
Jewett City borough, CT
Ledyard town, CT
Lisbon town, CT
Montville town, CT
New London city, CT
North Stonington town, CT
Norwich city, CT
Old Lyme town, CT
Preston town, CT
Salem town, CT
Sprague town, CT
Stonington borough, CT
Stonington town, CT
Waterford town, CT
Windham County, CT (part)
Canterbury town, CT
Plainfield town, CT
Washington County, RI (part)
Hopkinton town, RI
Westerly town, RI

New Orleans, LA MSA

Jefferson Parish, LA
Orleans Parish, LA
Plaquemines Parish, LA
St. Bernard Parish, LA
St. Charles Parish, LA
St. James Parish, LA
St. John the Baptist Parish, LA
St. Tammany Parish, LA

New York, NY PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**

Bergen–Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (part)
Bridgeport city, CT
Easton town, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (part)
Ansonia city, CT
Beacon Falls town, CT
Derby city, CT
Milford city (balance), CT
Oxford town, CT
Seymour town, CT
Woodmont borough, CT
Danbury, CT PMSA
Fairfield County, CT (part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown borough, CT
Newtown town, CT
Redding town, CT
Ridgefield town, CT
Sherman town, CT
Litchfield County, CT (part)
Bridgewater town, CT
New Milford town, CT
Roxbury town, CT
Washington town, CT
Dutchess County, NY PMSA
Dutchess County, NY

New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA—Con.

Jersey City, NJ PMSA
Hudson County, NJ
Middlesex–Somerset–Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth–Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau–Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY
New Haven–Meriden, CT PMSA
Middlesex County, CT (part)
Clinton town, CT
Killingworth town, CT
New Haven County, CT (part)
Bethany town, CT
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT
Woodbridge town, CT
New York, NY PMSA
Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY
Queens County, NY
Richmond County, NY
Rockland County, NY
Westchester County, NY
Newark, NJ PMSA
Essex County, NJ
Morris County, NJ
Sussex County, NJ
Union County, NJ
Warren County, NJ
Newburgh, NY–PA PMSA
Orange County, NY
Pike County, PA
Stamford–Norwalk, CT PMSA
Fairfield County, CT (part)
Darien town, CT
Greenwich town, CT
New Canaan town, CT
Norwalk city, CT
Stamford city, CT
Weston town, CT
Westport town, CT
Wilton town, CT
Trenton, NJ PMSA
Mercer County, NJ
Waterbury, CT PMSA
Litchfield County, CT (part)
Bethlehem town, CT
Thomaston town, CT
Watertown town, CT
Woodbury town, CT
New Haven County, CT (part)
Middlebury town, CT
Naugatuck borough, CT
Prospect town, CT
Southbury town, CT
Waterbury city, CT
Wolcott town, CT

Newark, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Newburgh, NY–PA PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA

Norfolk–Virginia Beach–Newport News, VA–NC MSA

Currituck County, NC
Gloucester County, VA
Isle of Wight County, VA
James City County, VA
Mathews County, VA
York County, VA
Chesapeake city, VA
Hampton city, VA
Newport News city, VA
Norfolk city, VA
Poquoson city, VA
Portsmouth city, VA
Suffolk city, VA
Virginia Beach city, VA
Williamsburg city, VA

Oakland, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Ocala, FL MSA

Marion County, FL

Odessa–Midland, TX MSA

Ector County, TX
Midland County, TX

Oklahoma City, OK MSA

Canadian County, OK
Cleveland County, OK
Logan County, OK
McClain County, OK
Oklahoma County, OK
Pottawatomie County, OK

Olympia, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Omaha, NE–IA MSA

Pottawattamie County, IA
Cass County, NE
Douglas County, NE
Sarpy County, NE
Washington County, NE

Orange County, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Orlando, FL MSA

Lake County, FL
Orange County, FL
Osceola County, FL
Seminole County, FL

Owensboro, KY MSA

Daviess County, KY

Panama City, FL MSA

Bay County, FL

Parkersburg–Marietta, WV–OH MSA

Washington County, OH
Wood County, WV

Pensacola, FL MSA

Escambia County, FL
Santa Rosa County, FL

Peoria–Pekin, IL MSA

Peoria County, IL
Tazewell County, IL
Woodford County, IL

Philadelphia, PA–NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA

Atlantic–Cape May, NJ PMSA
Atlantic County, NJ
Cape May County, NJ

Philadelphia, PA–NJ PMSA

Burlington County, NJ
Camden County, NJ
Gloucester County, NJ
Salem County, NJ
Bucks County, PA
Chester County, PA
Delaware County, PA
Montgomery County, PA

Philadelphia County, PA
Vineland–Millville–Bridgeton, NJ PMSA
Cumberland County, NJ

Wilmington–Newark, DE–MD PMSA
New Castle County, DE
Cecil County, MD

Phoenix–Mesa, AZ MSA

Maricopa County, AZ
Pinal County, AZ

Pine Bluff, AR MSA

Jefferson County, AR

Pittsburgh, PA MSA

Allegheny County, PA
Beaver County, PA
Butler County, PA
Fayette County, PA
Washington County, PA
Westmoreland County, PA

Pittsfield, MA MSA

Berkshire County, MA (part)
Adams town, MA
Cheshire town, MA
Dalton town, MA
Hinsdale town, MA
Lanesborough town, MA
Lee town, MA
Lenox town, MA
Pittsfield city, MA
Richmond town, MA
Stockbridge town, MA

Portland, ME MSA

Cumberland County, ME (part)
Cape Elizabeth town, ME
Casco town, ME
Cumberland town, ME
Falmouth town, ME
Freeport town, ME
Gorham town, ME
Gray town, ME
North Yarmouth town, ME
Portland city, ME
Raymond town, ME
Scarborough town, ME
South Portland city, ME
Standish town, ME
Westbrook city, ME
Windham town, ME
Yarmouth town, ME

York County, ME (part)
Buxton town, ME
Hollis town, ME
Limington town, ME
Old Orchard Beach town, ME

Portland–Vancouver, OR–WA PMSA—see Portland–Salem, OR–WA CMSA

Portland–Salem, OR–WA CMSA

Portland–Vancouver, OR–WA PMSA

Clackamas County, OR
Columbia County, OR
Multnomah County, OR
Washington County, OR
Yamhill County, OR
Clark County, WA

Salem, OR PMSA

Marion County, OR
Polk County, OR

Portsmouth–Rochester, NH–ME PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA

Providence–Fall River–Warwick, RI–MA MSA

Bristol County, MA (part)
Attleboro city, MA
Fall River city, MA
North Attleborough town, MA
Rehoboth town, MA
Seekonk town, MA
Somerset town, MA
Swansea town, MA
Westport town, MA
Bristol County, RI
Barrington town, RI
Bristol town, RI
Warren town, RI
Kent County, RI
Coventry town, RI
East Greenwich town, RI
Warwick city, RI
West Greenwich town, RI
West Warwick town, RI
Newport County, RI (part)
Jamestown town, RI
Little Compton town, RI
Tiverton town, RI

Providence County, RI
Burrillville town, RI
Central Falls city, RI
Cranston city, RI
Cumberland town, RI
East Providence city, RI
Foster town, RI
Glocester town, RI
Johnston town, RI
Lincoln town, RI
North Providence town, RI
North Smithfield town, RI
Pawtucket city, RI
Providence city, RI
Scituate town, RI
Smithfield town, RI
Woonsocket city, RI
Washington County, RI (part)
Charlestown town, RI
Exeter town, RI
Narragansett town, RI
North Kingstown town, RI
Richmond town, RI
South Kingstown town, RI

Provo–Orem, UT MSA

Utah County, UT

Pueblo, CO MSA

Pueblo County, CO

Punta Gorda, FL MSA

Charlotte County, FL

Racine, WI PMSA—see Milwaukee–Racine, WI CMSA

Raleigh–Durham–Chapel Hill, NC MSA

Chatham County, NC
Durham County, NC
Franklin County, NC
Johnston County, NC
Orange County, NC
Wake County, NC

Rapid City, SD MSA

Pennington County, SD

Reading, PA MSA

Berks County, PA

Redding, CA MSA

Shasta County, CA

Reno, NV MSA

Washoe County, NV

Richland–Kennewick–Pasco, WA MSA

Benton County, WA
Franklin County, WA

Richmond–Petersburg, VA MSA

Charles City County, VA
Chesterfield County, VA
Dinwiddie County, VA
Goochland County, VA
Hanover County, VA
Henrico County, VA
New Kent County, VA
Powhatan County, VA
Prince George County, VA
Colonial Heights city, VA
Hopewell city, VA
Petersburg city, VA
Richmond city, VA

Riverside–San Bernardino, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA

Roanoke, VA MSA

Botetourt County, VA
Roanoke County, VA
Roanoke city, VA
Salem city, VA

Rochester, MN MSA

Olmsted County, MN

Rochester, NY MSA

Genesee County, NY
Livingston County, NY
Monroe County, NY
Ontario County, NY
Orleans County, NY
Wayne County, NY

Rockford, IL MSA

Boone County, IL
Ogle County, IL
Winnebago County, IL

Rocky Mount, NC MSA

Edgecombe County, NC
Nash County, NC

Sacramento, CA PMSA—see Sacramento–Yolo, CA CMSA

Sacramento–Yolo, CA CMSA

Sacramento, CA PMSA
El Dorado County, CA
Placer County, CA
Sacramento County, CA
Yolo, CA PMSA
Yolo County, CA

Saginaw–Bay City–Midland, MI MSA

Bay County, MI
Midland County, MI
Saginaw County, MI

St. Cloud, MN MSA

Benton County, MN
Stearns County, MN

St. Joseph, MO MSA

Andrew County, MO
Buchanan County, MO

St. Louis, MO–IL MSA

Clinton County, IL
Jersey County, IL
Madison County, IL
Monroe County, IL
St. Clair County, IL
Franklin County, MO
Jefferson County, MO
Lincoln County, MO
St. Charles County, MO
St. Louis County, MO
Warren County, MO
St. Louis city, MO

Salem, OR PMSA—see Portland–Salem, OR–WA CMSA

Salinas, CA MSA

Monterey County, CA

Salt Lake City–Ogden, UT MSA

Davis County, UT
Salt Lake County, UT
Weber County, UT

San Angelo, TX MSA

Tom Green County, TX

San Antonio, TX MSA

Bexar County, TX
Comal County, TX
Guadalupe County, TX
Wilson County, TX

San Diego, CA MSA

San Diego County, CA

San Francisco, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

San Francisco–Oakland–San Jose, CA CMSA

Oakland, CA PMSA
Alameda County, CA
Contra Costa County, CA
San Francisco, CA PMSA
Marin County, CA
San Francisco County, CA
San Mateo County, CA
San Jose, CA PMSA
Santa Clara County, CA
Santa Cruz–Watsonville, CA PMSA
Santa Cruz County, CA
Santa Rosa, CA PMSA
Sonoma County, CA
Vallejo–Fairfield–Napa, CA PMSA
Napa County, CA
Solano County, CA

San Jose, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

San Luis Obispo–Atascadero–Paso Robles, CA MSA

San Luis Obispo County, CA

Santa Barbara–Santa Maria–Lompoc, CA MSA

Santa Barbara County, CA

Santa Cruz–Watsonville, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Santa Fe, NM MSA

Los Alamos County, NM
Santa Fe County, NM

Santa Rosa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA

Sarasota–Bradenton, FL MSA

Manatee County, FL
Sarasota County, FL

Savannah, GA MSA

Bryan County, GA
Chatham County, GA
Effingham County, GA

Scranton–Wilkes-Barre–Hazleton, PA MSA

Columbia County, PA
Lackawanna County, PA
Luzerne County, PA
Wyoming County, PA

Seattle–Bellevue–Everett, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA

Seattle–Tacoma–Bremerton, WA CMSA

Bremerton, WA PMSA
Kitsap County, WA
Olympia, WA PMSA
Thurston County, WA
Seattle–Bellevue–Everett, WA PMSA
Island County, WA
King County, WA
Snohomish County, WA
Tacoma, WA PMSA
Pierce County, WA

Sharon, PA MSA

Mercer County, PA

Sheboygan, WI MSA

Sheboygan County, WI

Sherman–Denison, TX MSA

Grayson County, TX

Shreveport–Bossier City, LA MSA

Bossier Parish, LA
Caddo Parish, LA
Webster Parish, LA

Sioux City, IA–NE MSA

Woodbury County, IA
Dakota County, NE

Sioux Falls, SD MSA

Lincoln County, SD
Minnehaha County, SD

South Bend, IN MSA

St. Joseph County, IN

Spokane, WA MSA

Spokane County, WA

Springfield, IL MSA

Menard County, IL
Sangamon County, IL

Springfield, MO MSA

Christian County, MO
Greene County, MO
Webster County, MO

Springfield, MA MSA

Franklin County, MA (part)
Sunderland town, MA
Hampden County, MA (part)
Agawam city, MA
Chicopee city, MA

Springfield, MA MSA—Con.

Hampden County, MA (part)—Con.
 East Longmeadow town, MA
 Hampden town, MA
 Holyoke city, MA
 Longmeadow town, MA
 Ludlow town, MA
 Monson town, MA
 Montgomery town, MA
 Palmer town, MA
 Russell town, MA
 Southwick town, MA
 Springfield city, MA
 Westfield city, MA
 West Springfield town, MA
 Wilbraham town, MA
 Hampshire County, MA (part)
 Amherst town, MA
 Belchertown town, MA
 Easthampton town, MA
 Granby town, MA
 Hadley town, MA
 Hatfield town, MA
 Huntington town, MA
 Northampton city, MA
 Southampton town, MA
 South Hadley town, MA
 Ware town, MA
 Williamsburg town, MA

Stamford–Norwalk, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**State College, PA MSA**
Centre County, PA**Steubenville–Weirton, OH–WV MSA**

Jefferson County, OH
 Brooke County, WV
 Hancock County, WV

Stockton–Lodi, CA MSA
San Joaquin County, CA**Sumter, SC MSA**
Sumter County, SC**Syracuse, NY MSA**
Cayuga County, NY
Madison County, NY
Onondaga County, NY
Oswego County, NY**Tacoma, WA PMSA—see Seattle–Tacoma–Bremerton, WA CMSA****Tallahassee, FL MSA**
Gadsden County, FL
Leon County, FL**Tampa–St. Petersburg–Clearwater, FL MSA**
Hernando County, FL
Hillsborough County, FL
Pasco County, FL
Pinellas County, FL**Terre Haute, IN MSA**
Clay County, IN
Vermillion County, IN
Vigo County, IN**Texarkana, TX–Texarkana, AR MSA**
Miller County, AR
Bowie County, TX**Toledo, OH MSA**

Fulton County, OH
 Lucas County, OH
 Wood County, OH

Topeka, KS MSA
Shawnee County, KS**Trenton, NJ PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA****Tucson, AZ MSA**
Pima County, AZ**Tulsa, OK MSA**
Creek County, OK
Osage County, OK
Rogers County, OK
Tulsa County, OK
Wagoner County, OK**Tuscaloosa, AL MSA**
Tuscaloosa County, AL**Tyler, TX MSA**
Smith County, TX**Utica–Rome, NY MSA**
Herkimer County, NY
Oneida County, NY**Vallejo–Fairfield–Napa, CA PMSA—see San Francisco–Oakland–San Jose, CA CMSA****Ventura, CA PMSA—see Los Angeles–Riverside–Orange County, CA CMSA****Victoria, TX MSA**
Victoria County, TX**Vineland–Millville–Bridgeton, NJ PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Visalia–Tulare–Porterville, CA MSA**
Tulare County, CA**Waco, TX MSA**
McLennan County, TX**Washington, DC–MD–VA–WV PMSA—see Washington–Baltimore, DC–MD–VA–WV CMSA****Washington–Baltimore, DC–MD–VA–WV CMSA**
Baltimore, MD PMSA
Anne Arundel County, MD
Baltimore County, MD
Carroll County, MD
Harford County, MD
Howard County, MD
Queen Anne's County, MD
Baltimore city, MD
Hagerstown, MD PMSA
Washington County, MD
Washington, DC–MD–VA–WV PMSA
District of Columbia, DC
Calvert County, MD
Charles County, MD
Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA**Washington–Baltimore, DC–MD–VA–WV CMSA—Con.**

Washington, DC–MD–VA–WV PMSA—Con.
 Fauquier County, VA
 King George County, VA
 Loudoun County, VA
 Prince William County, VA
 Spotsylvania County, VA
 Stafford County, VA
 Warren County, VA
 Alexandria city, VA
 Fairfax city, VA
 Falls Church city, VA
 Fredericksburg city, VA
 Manassas city, VA
 Manassas Park city, VA
 Berkeley County, WV
 Jefferson County, WV

Waterbury, CT PMSA—see New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA**Waterloo–Cedar Falls, IA MSA**
Black Hawk County, IA**Wausau, WI MSA**
Marathon County, WI**West Palm Beach–Boca Raton, FL MSA**
Palm Beach County, FL**Wheeling, WV–OH MSA**
Belmont County, OH
Marshall County, WV
Ohio County, WV**Wichita, KS MSA**
Butler County, KS
Harvey County, KS
Sedgwick County, KS**Wichita Falls, TX MSA**
Archer County, TX
Wichita County, TX**Williamsport, PA MSA**
Lycoming County, PA**Wilmington–Newark, DE–MD PMSA—see Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA****Wilmington, NC MSA**
Brunswick County, NC
New Hanover County, NC**Worcester, MA–CT PMSA—see Boston–Worcester–Lawrence, MA–NH–ME–CT CMSA****Yakima, WA MSA**
Yakima County, WA**Yolo, CA PMSA—see Sacramento–Yolo, CA CMSA****York, PA MSA**
York County, PA**Youngstown–Warren, OH MSA**
Columbiana County, OH
Mahoning County, OH
Trumbull County, OH**Yuba City, CA MSA**
Sutter County, CA
Yuba County, CA**Yuma, AZ MSA**
Yuma County, AZ

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

- Printed reports [P]
- CD-ROM [C]
- Highlights online [+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through January 1996) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available March 1996 through May 1996) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available November 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Administrative and Customer Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

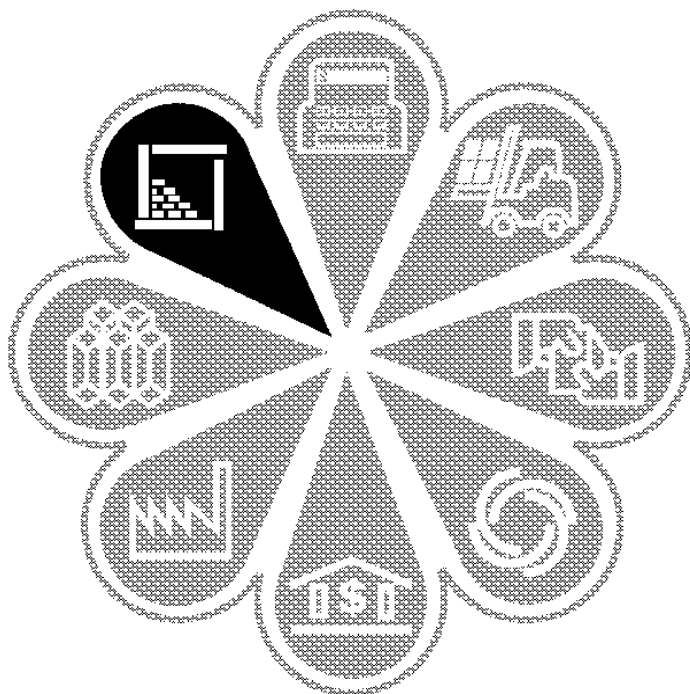
Census of Construction Industries

CC92-I-1

INDUSTRY SERIES

General Contractors— Single-Family Houses

Industry 1521



1992 Census of Construction Industries

CC92-I-1

INDUSTRY SERIES

General Contractors— Single-Family Houses

Industry 1521

Issued June 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

Acknowledgments

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This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Juliana Van Berkum**, **Susan L. Hostetter**, **Doris M. Kling**, **Carolyn J. Stone**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke**. Under the direction of **C. Lloyd Anderson**, the Systems Support Staff maintained the small computers and assisted in the management of computer output.

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Mailout preparation and receipt operations, clerical and analytical review activities, data keying, and geocoding review were performed by the staff of the Data Preparation Division, **Judith N. Petty**, Chief.

Geographic coding procedures and associated computer programs were developed by the staff of the Geography Division, **Joel Morrison**, Chief.

The computer processing systems were developed and coordinated in the Economic Statistical Methods and Programming Division, **Charles P. Paulter, Jr.**, Chief, and **Sarah W. Baumgardner**, Assistant Chief. **Samuel Rozenel**, Chief, Current Construction Branch, was responsible for the design and implementation of the computer systems. The computer programs were prepared under the supervision of **Leonard S. Sammarco** and **Kevin J. Montgomery**.

Computer processing was performed in the Computer Services Division, **Marvin D. Raines**, Chief.

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If you have any questions concerning the statistics in this report, call 301-457-4680.



**Economics and Statistics
Administration**

Everett M. Ehrlich, Under Secretary
for Economic Affairs



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Director for Programs

Frederick T. Knickerbocker, Associate
Director for Economic Programs

Thomas L. Mesenbourg, Assistant Director
for Economic Programs

**ECONOMIC PLANNING AND COORDINATION
DIVISION**

John P. Govoni, Chief

MANUFACTURING AND CONSTRUCTION DIVISION
David W. Cartwright, Chief

Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{p_i}$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

Contents

General Contractors— Single-Family Houses

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appears as part of the number of each page]

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**Statistics for Establishments Without Payroll appear in the U.S. Industry
Summary Report.**

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Summary of Findings

Establishments classified in this industry are primarily engaged in the construction of single-family houses, row-houses, townhouses, and townhouse-type condominiums (including new work, additions, alterations, remodeling, and repair). For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$49.5 billion in total dollar value of business. Of this amount, \$48.6 billion were for the value of construction work. These establishments paid out \$16.7 billion for materials, components, and supplies and \$15.0 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$647 million. Value added for 1992 was \$17.2 billion.

There were 107,495 establishments with total employment averaging 403,754 during the year. Total payroll for 1992 was \$7.3 billion.

Larger establishments with 20 employees or more, while representing only 2 percent of the total number of

employer establishments in this industry, accounted for 18 percent of all business done.

A “construction establishment” is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

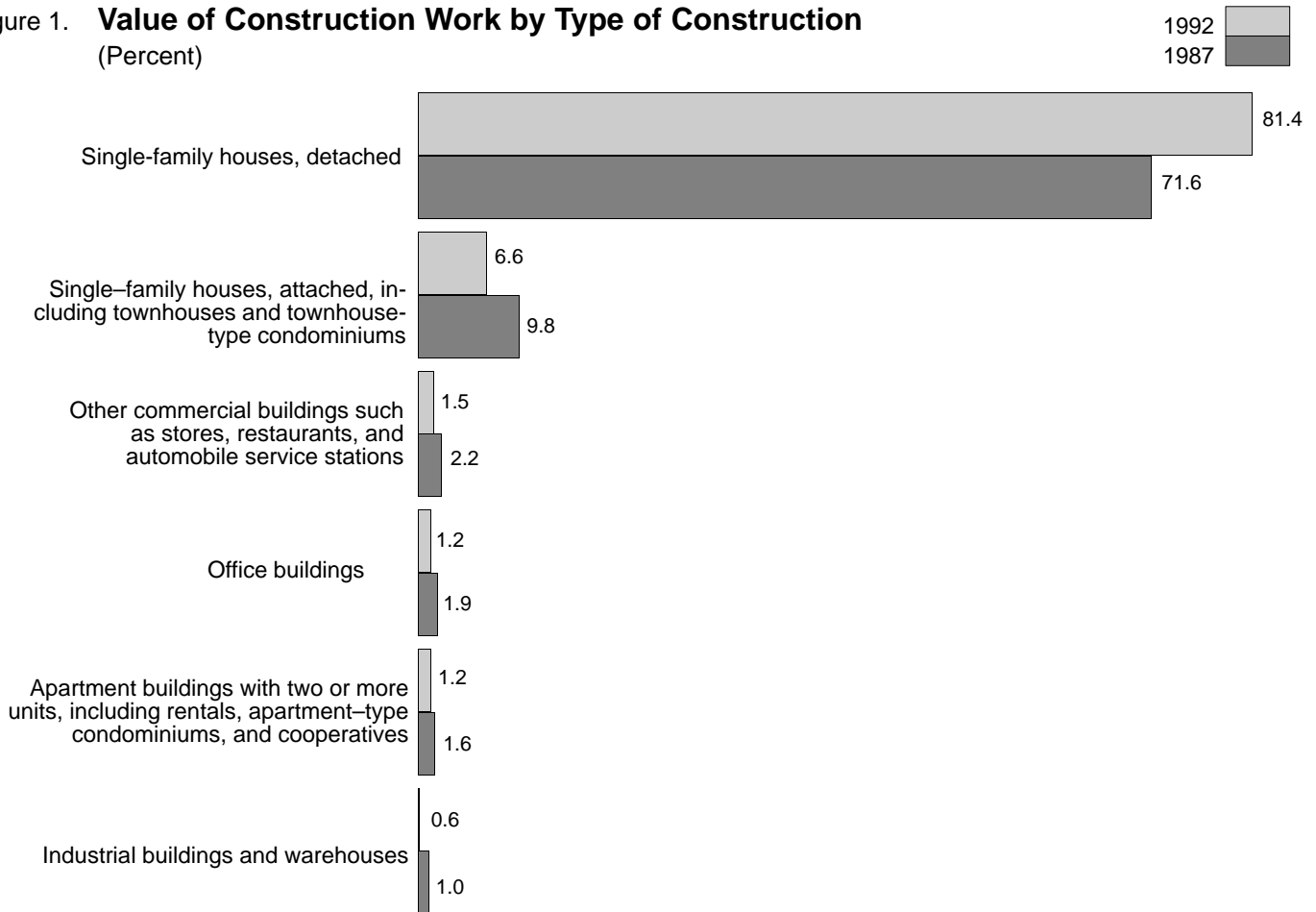


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

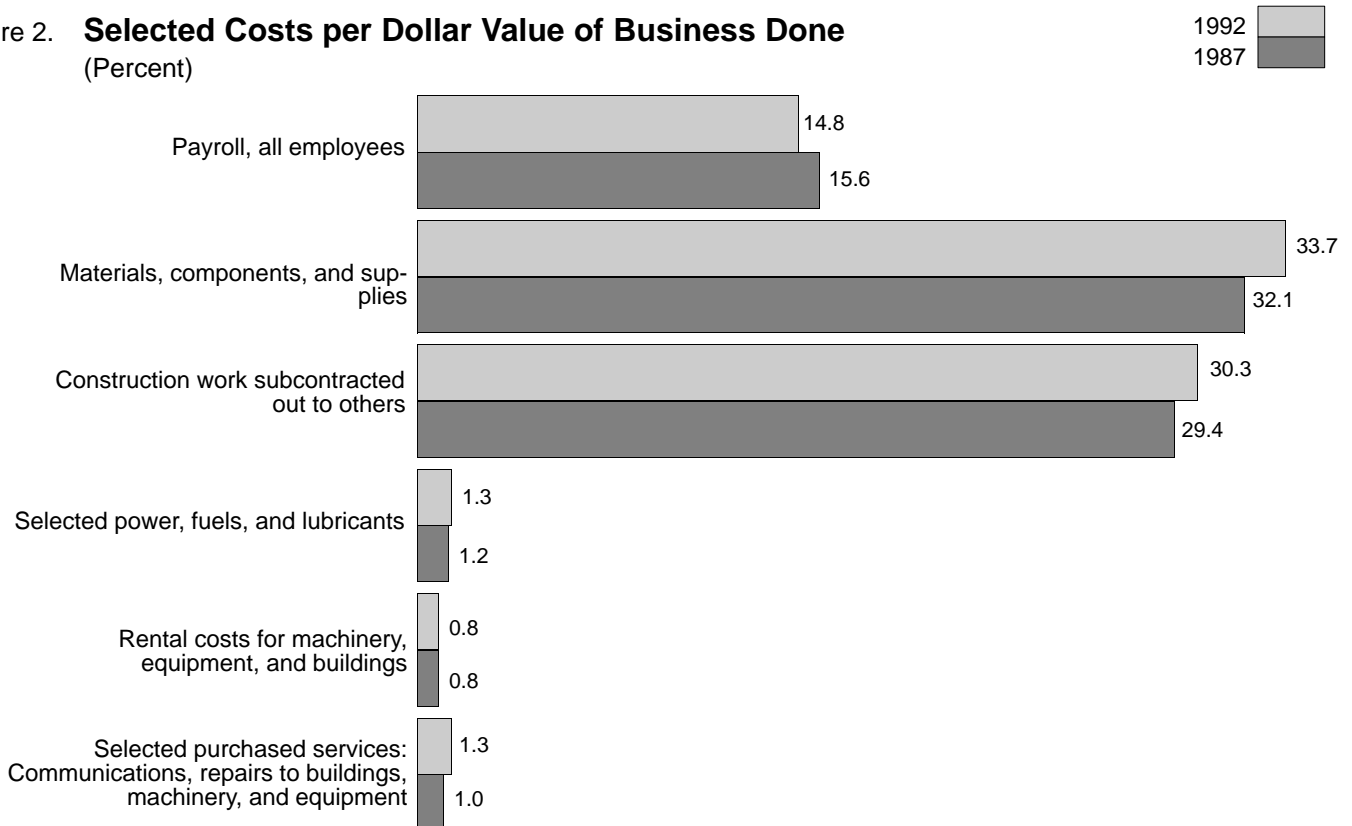


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	107 495	403 754	296 236	7 277 890	4 869 474	48 633 331	33 660 224	17 183 012	17 312 728
Alabama -----	1 362	5 316	3 882	79 442	52 325	565 373	395 770	218 646	185 401
Alaska -----	350	1 110	811	20 521	14 597	125 146	89 039	51 222	40 150
Arizona -----	1 393	7 131	5 057	112 523	71 934	823 932	498 838	280 868	233 835
Arkansas -----	666	2 018	1 442	30 164	19 827	241 973	182 803	84 066	102 144
California -----	13 950	52 093	38 821	1 032 300	701 612	6 152 771	4 075 376	2 426 051	1 744 030
Colorado -----	1 651	6 721	4 793	123 045	79 323	819 920	523 517	274 249	260 105
Connecticut -----	1 646	5 149	3 717	112 452	74 816	628 974	449 255	237 053	220 767
Delaware -----	458	1 892	1 394	39 533	23 919	202 108	137 883	65 299	74 755
District of Columbia -----	62	416	307	8 222	5 104	36 375	26 597	17 298	10 166
Florida -----	5 435	26 220	17 623	454 401	266 775	4 071 208	2 593 783	1 200 017	1 451 004
Georgia -----	2 014	7 665	5 372	128 817	78 249	1 151 671	771 847	382 047	405 881
Hawaii -----	564	3 311	2 460	91 147	63 175	502 353	336 294	205 806	139 942
Idaho -----	774	2 494	1 917	39 450	28 376	298 742	204 612	99 180	114 264
Illinois -----	4 238	15 598	11 341	303 767	202 627	1 849 065	1 340 010	696 742	686 090
Indiana -----	2 824	11 581	8 663	204 952	139 423	1 440 902	1 091 022	504 289	607 199
Iowa -----	1 222	4 486	3 470	74 352	55 385	485 153	365 307	177 802	198 342
Kansas -----	909	3 733	2 767	64 758	40 864	492 520	338 539	149 907	193 589
Kentucky -----	1 198	4 429	3 227	66 642	42 679	530 506	383 281	193 093	196 447
Louisiana -----	807	3 448	2 497	50 579	33 300	372 434	257 141	116 124	143 325
Maine -----	940	3 367	2 459	55 805	40 156	320 310	237 240	133 678	110 677
Maryland -----	2 941	12 882	9 523	243 389	157 564	1 388 660	1 024 808	573 117	468 067
Massachusetts -----	2 151	6 766	4 916	138 735	90 818	878 341	605 577	302 552	319 197
Michigan -----	4 331	15 815	11 684	283 703	192 895	1 724 596	1 221 174	611 570	638 441
Minnesota -----	1 905	6 713	4 947	123 555	85 258	874 807	577 652	286 268	315 624
Mississippi -----	599	2 118	1 675	31 381	20 192	(S)	(S)	75 757	(S)
Missouri -----	2 330	9 360	7 196	154 918	108 470	927 277	681 402	353 345	360 548
Montana -----	645	1 882	1 530	29 448	23 432	201 058	144 129	57 404	92 009
Nebraska -----	691	2 501	1 926	39 004	28 828	237 662	181 886	87 792	99 407
Nevada -----	507	2 598	1 964	58 271	38 166	507 787	247 064	182 558	105 264
New Hampshire -----	728	2 170	1 633	35 315	26 538	197 702	147 215	73 417	76 548
New Jersey -----	3 394	10 282	7 633	202 575	140 893	1 152 543	862 965	471 768	403 302
New Mexico -----	1 015	3 507	2 742	50 318	36 002	328 529	239 275	129 194	119 772
New York -----	6 638	20 907	15 309	385 146	269 085	2 185 871	1 617 622	855 481	795 035
North Carolina -----	3 365	12 408	9 170	201 146	137 521	1 462 602	1 049 820	470 356	600 047
North Dakota -----	233	979	797	14 245	11 078	87 443	67 207	35 188	33 393
Ohio -----	4 130	15 890	11 699	289 410	191 175	1 988 607	1 427 032	695 571	769 251
Oklahoma -----	590	2 262	1 570	36 684	21 095	298 739	211 328	120 407	95 966
Oregon -----	1 868	6 295	4 492	113 140	76 786	737 044	495 776	266 354	250 109
Pennsylvania -----	5 713	22 485	16 777	410 230	278 387	2 617 485	1 849 481	889 653	997 245
Rhode Island -----	545	1 380	1 024	25 384	17 000	131 643	97 821	53 838	44 831
South Carolina -----	1 696	6 620	4 936	104 281	70 248	777 883	533 410	240 583	306 756
South Dakota -----	321	1 144	960	17 381	13 564	141 089	106 861	51 442	55 852
Tennessee -----	1 489	5 463	3 986	88 456	55 912	732 888	515 020	209 610	311 580
Texas -----	3 773	15 228	9 782	273 668	151 163	2 518 180	1 645 859	720 783	956 867
Utah -----	850	3 683	2 869	59 887	44 630	415 066	286 142	156 335	138 183
Vermont -----	759	2 712	2 063	41 357	33 058	218 104	165 727	88 940	79 436
Virginia -----	3 654	14 307	10 597	240 756	164 293	1 403 512	1 014 818	510 060	519 904
Washington -----	4 362	13 005	9 816	240 525	168 272	1 454 831	1 020 871	565 161	487 583
West Virginia -----	1 031	3 139	2 506	42 174	32 827	220 794	175 864	88 170	91 723
Wisconsin -----	2 402	9 554	7 246	184 622	128 481	1 319 855	866 558	399 065	501 902
Wyoming -----	377	1 525	1 245	25 914	21 380	137 324	100 651	47 837	54 681

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
14 973 107	1 846 577	404 408	461 775	3 617 961	396 291	39 098 146	14 969 716	1	1	3	U.S.
169 603	(S)	5 402	6 315	41 057	5 816	497 097	177 006	6	7	30	AL
36 107	*6 118	980	572	8 063	(S)	(S)	(S)	11	11	30	AK
325 094	45 399	7 074	6 235	47 539	5 418	597 031	218 421	4	5	16	AZ
59 170	7 179	(S)	1 805	20 316	1 816	164 821	56 521	9	12	27	AR
2 077 396	257 240	74 688	47 466	406 963	50 427	5 467 742	2 241 792	2	2	6	CA
296 403	34 392	11 856	7 707	49 076	4 711	492 042	173 665	4	6	15	CO
179 719	32 516	7 182	7 161	71 452	9 836	997 480	428 651	4	5	15	CT
64 225	6 578	938	2 218	21 562	2 326	208 310	79 387	8	7	27	DE
9 777	*1 756	233	(S)	1 572	231	22 611	7 955	25	30	(S)	DC
1 477 425	125 692	22 748	27 968	227 639	25 482	3 174 347	1 006 086	3	3	10	FL
379 824	23 031	6 545	8 197	49 623	8 816	(D)	308 826	4	6	19	GA
166 059	28 540	7 664	3 900	39 854	1 910	273 734	114 574	5	7	13	HI
94 130	10 354	1 745	2 096	13 442	1 025	91 375	32 040	8	9	26	ID
509 055	82 812	15 723	21 665	129 481	13 514	1 392 960	549 697	3	4	14	IL
349 880	37 864	8 740	15 269	114 804	8 234	713 896	301 004	4	5	15	IN
119 847	23 115	3 169	9 132	36 982	2 219	183 432	70 525	5	7	17	IA
153 981	17 364	2 931	4 794	34 240	3 038	279 739	109 974	7	14	28	KS
147 225	22 189	2 087	4 381	29 778	2 797	241 910	87 614	7	9	20	KY
115 293	15 055	4 056	*6 463	30 252	2 768	216 736	90 930	8	9	44	LA
83 070	19 436	3 446	4 124	36 574	5 468	421 697	171 027	6	6	28	ME
363 853	45 921	7 822	19 697	107 832	12 947	1 249 590	481 626	5	5	20	MD
272 764	36 300	(S)	8 027	79 717	15 444	1 508 197	636 125	4	5	14	MA
503 423	67 088	12 646	21 609	143 010	12 298	1 211 838	441 816	3	4	11	MI
297 155	30 117	4 594	9 186	63 976	6 640	692 733	271 143	4	5	18	MN
(S)	8 086	1 132	(S)	(S)	2 359	170 528	71 139	9	(S)	(S)	MS
245 875	48 833	7 452	7 682	57 859	8 054	675 705	302 189	4	6	14	MO
56 929	(S)	1 155	2 577	12 119	815	63 289	26 983	8	10	26	MT
55 776	(S)	1 975	3 206	21 451	2 037	168 995	59 157	8	9	20	NE
260 723	13 450	5 941	3 714	45 958	1 866	242 541	91 992	6	8	18	NV
50 487	14 531	2 119	2 085	24 026	5 936	478 134	196 197	6	6	25	NH
289 578	65 983	10 820	9 176	120 506	16 262	1 709 637	703 419	3	4	13	NJ
89 254	9 579	2 475	5 835	41 774	3 035	213 351	81 416	7	8	20	NM
568 249	95 098	18 305	20 627	177 134	28 883	2 494 522	1 052 516	2	3	10	NY
412 782	49 580	12 122	12 013	88 639	14 315	1 348 543	452 570	3	4	13	NC
20 236	3 162	(S)	1 271	8 244	678	45 585	18 017	15	14	37	ND
561 576	53 276	14 328	14 729	126 638	12 831	1 309 904	513 005	3	4	11	OH
87 411	*8 976	(S)	1 395	15 859	1 700	173 060	55 181	11	13	24	OK
241 267	38 693	8 665	8 540	47 275	3 673	329 129	128 055	5	5	15	OR
768 004	87 885	23 307	26 390	262 738	21 006	2 294 671	793 325	2	3	9	PA
33 823	8 690	(S)	(S)	(S)	2 249	183 421	69 702	7	9	(S)	RI
244 473	29 686	5 085	8 003	66 083	6 838	642 020	222 500	5	6	32	SC
34 229	*3 349	*1 579	1 261	7 407	700	33 376	15 667	12	14	28	SD
217 868	14 611	3 870	8 761	54 282	5 967	513 227	196 234	5	6	32	TN
872 320	93 133	14 690	21 327	213 656	13 373	1 408 821	503 828	3	4	13	TX
128 923	14 394	1 936	5 005	29 896	1 495	166 365	57 224	7	7	17	UT
52 377	(S)	1 521	2 410	21 540	3 804	319 208	120 967	8	8	26	VT
388 694	42 473	10 647	12 416	106 810	14 995	1 265 562	499 634	3	4	13	VA
433 960	59 129	18 249	12 716	106 560	8 318	753 601	285 585	3	3	11	WA
(S)	7 291	1 750	3 718	16 808	2 440	139 313	65 780	7	7	24	WV
453 297	41 476	8 450	16 299	105 286	7 893	(D)	276 405	4	5	10	WI
36 674	4 901	(S)	1 599	12 703	(S)	(S)	(S)	8	11	26	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	107 495	90 378	72 115	100 993	(Z)	1	1	1
Proprietors and working partners	46 846	24 230	27 053	65 614	1	2	1	1
All employees**	403 754	396 291	309 614	437 681	1	1	1	1
Construction workers:								
March	274 874	283 720	230 442	332 747	1	1	1	1
May	301 505	312 298	253 129	407 019	1	1	1	1
August	321 730	332 509	262 053	416 252	1	1	1	1
November	286 835	300 695	241 436	373 479	1	1	1	1
Average	296 236	307 305	253 457	382 806	1	1	1	1
Other employees:								
March	111 876	86 843	55 640	51 876	1	1	1	1
May	105 637	89 075	(NA)	(NA)	1	1	(NA)	(NA)
August	106 118	91 730	(NA)	(NA)	1	1	(NA)	(NA)
November	106 440	88 294	(NA)	(NA)	1	1	(NA)	(NA)
Average	107 518	88 985	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	7 277 890	6 272 178	3 606 261	3 736 421	1	1	1	1
Payroll, construction workers	4 869 474	4 342 944	2 748 962	3 066 031	1	1	1	1
Payroll, other employees	2 408 416	1 929 234	857 299	670 390	1	1	1	1
First-quarter payroll, all employees	1 616 820	1 362 439	834 503	773 525	1	1	1	1
Fringe benefits, all employees	1 336 468	1 181 709	667 857	617 994	1	1	1	2
Legally required expenditures	1 084 719	939 942	520 227	459 086	1	1	1	1
Voluntary expenditures	251 749	241 767	147 629	158 908	2	1	1	3
Dollar value of business done	49 468 847	40 105 269	20 129 090	21 890 323	1	1	1	1
Value of construction work	48 633 331	39 098 146	19 646 355	21 292 675	1	1	1	1
Value of construction work subcontracted in from others	1 846 577	3 035 374	1 016 099	1 161 918	3	4	2	14
Other business receipts	835 516	1 007 122	482 734	597 649	3	2	2	2
Net value of construction work†	33 660 224	27 319 239	14 115 590	15 070 355	1	1	1	1
Value added††	17 183 012	14 969 716	7 876 520	7 297 013	1	1	1	1
Selected costs	32 285 835	25 135 553	12 252 569	14 593 311	1	1	1	1
Materials, components, and supplies	16 665 885	12 863 522	6 357 278	8 013 183	1	1	1	1
Construction work subcontracted out to others	14 973 107	11 778 907	5 530 765	6 222 320	1	1	1	2
Selected power, fuels, and lubricants	646 843	493 123	364 526	357 808	1	1	1	1
Electricity	132 464	89 445	66 360	48 666	2	2	1	1
Natural and manufactured gas	22 194	16 792	13 669	24 379	3	3	2	4
Gasoline and diesel fuel	463 161	356 584	256 574	213 891	2	1	1	1
On highway use	418 577	323 666	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	44 584	32 917	(NA)	(NA)	5	4	(NA)	(NA)
Other, including lubricating oils and greases	29 023	30 300	27 921	70 873	4	2	2	1
Rental cost for machinery, equipment, and buildings	404 408	324 844	167 870	104 457	3	2	2	2
For machinery and equipment	203 949	170 465	98 857	68 632	4	4	2	2
For buildings	200 460	154 379	69 013	35 825	3	2	2	2
Selected purchased services	663 007	403 094	266 781	442 884	2	2	1	3
Communication services	316 498	180 919	113 080	145 680	3	2	1	8
Repairs to buildings and other structures	45 528	30 314	17 990	27 298	5	4	2	5
Repairs to machinery and equipment	300 981	191 860	135 710	269 906	3	2	1	2
Ownership of construction projects:								
Value of construction work	48 633 331	39 098 146	19 646 355	21 292 675	1	1	1	1
Government owned	1 235 358	1 065 338	891 347	551 128	4	5	10	3
Federal	601 780	401 859	(NA)	(NA)	4	8	(NA)	(NA)
State and local	633 578	663 479	(NA)	(NA)	6	5	(NA)	(NA)
Privately owned	47 397 973	38 032 807	18 755 007	20 741 546	1	1	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	3 321 866	2 955 441	2	2
Capital expenditures, other than land -----	461 775	515 125	3	2
New -----	344 813	397 530	3	2
Used -----	116 962	117 595	4	3
Retirements and disposition of depreciable assets -----	165 680	128 466	7	6
End-of-year gross book value of depreciable assets -----	3 617 961	3 342 100	2	2
Depreciation charges during year -----	444 881	426 187	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	953 181	1 045 839	4	4
Capital expenditures, other than land -----	72 049	98 974	7	5
New buildings and other structures -----	55 131	68 204	9	7
Used buildings and other structures -----	16 918	30 770	13	7
Retirements and disposition of depreciable assets -----	42 361	46 001	22	16
End-of-year gross book value of depreciable assets -----	982 868	1 098 812	4	4
Depreciation charges during year -----	88 266	86 124	6	4
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	2 368 685	1 909 601	2	1
Capital expenditures, other than land -----	389 726	416 150	2	2
New machinery and equipment, including automobiles and trucks -----	289 682	329 326	3	2
New automobiles and trucks, intended primarily for highway use -----	156 083	218 613	3	3
Used machinery and equipment, including automobiles and trucks -----	100 044	86 824	5	4
Retirements and disposition of depreciable assets -----	123 319	82 464	5	4
End-of-year gross book value of depreciable assets -----	2 635 092	2 243 287	2	1
Depreciation charges during year -----	356 615	340 063	2	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	107 495	(Z)
Value of construction work	48 633 331	1
Establishments with inventories:		
Number	23 677	1
Value of construction work	12 648 017	1
Inventories ¹ :		
End of 1992, materials and supplies	593 990	6
End of 1991, materials and supplies	553 322	5
Establishments with no inventories:		
Number	45 668	1
Value of construction work	21 530 183	1
Establishments not reporting:		
Number	38 150	1
Value of construction work	14 455 132	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	107 495	83 278	16 872	5 443	1 599	231	60	10	1	2
All employees** -----	403 754	154 281	104 539	69 323	44 603	15 347	8 551	3 499	3 611	(D)
Payroll, all employees -----	7 277 890	2 422 702	1 922 839	1 383 040	945 479	329 509	159 485	52 925	61 912	(D)
Dollar value of business done -----	49 468 847	19 901 730	12 418 059	8 232 693	5 398 075	1 870 947	910 689	386 142	350 511	(D)
Value of construction work -----	48 633 331	19 626 452	12 221 835	8 069 855	5 274 842	1 830 250	879 562	381 618	348 917	(D)
Net value of construction work† -----	33 660 224	13 809 541	8 472 546	5 472 239	3 552 670	1 254 131	563 006	255 624	<u>280 466</u>	(D)
Value added†† -----	17 183 012	6 755 825	4 253 007	2 867 978	2 027 691	725 277	295 411	130 934	126 888	(D)
Cost of materials, components, supplies, and fuels -----	17 312 728	7 328 994	4 415 763	2 767 099	1 648 213	569 550	298 722	129 214	<u>155 172</u>	(D)
Cost of construction work subcontracted out to others -----	14 973 107	5 816 911	3 749 289	2 597 616	1 722 171	576 119	316 556	125 994	<u>68 451</u>	(D)
Rental cost for machinery, equipment, and buildings ---	404 408	151 041	113 229	71 947	43 771	13 759	6 953	1 974	<u>1 734</u>	(D)
Capital expenditures, other than land -----	461 775	219 976	114 050	73 955	35 376	8 073	<u>10 345</u>	(D)	(D)	(D)
End-of-year gross book value of depreciable assets ---	3 617 961	1 544 503	856 363	632 321	325 067	80 788	<u>178 920</u>	(D)	(D)	(D)
1987										
All employees** -----	396 291	(S)	107 140	78 513	51 992	16 817	7 255	4 890	2 723	—
Value of construction work -----	39 098 146	(S)	9 555 468	7 697 348	5 051 520	1 619 631	819 772	<u>920 260</u>	(D)	—
Value added†† -----	14 969 716	(S)	3 649 918	3 021 143	2 060 855	671 811	349 719	<u>454 552</u>	(D)	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	1	2	2	2	3	(Z)	(Z)	(Z)	(D)
Net value of construction work† -----	1	1	2	2	2	1	(Z)	(Z)	(Z)	(D)
Capital expenditures, other than land -----	3	3	6	7	4	2	(Z)	(D)	(D)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	107 495	(S)	(S)	15 660	32 614	20 255	13 179	7 635	1 963	619	206
All employees** -----	403 754	(S)	(S)	22 971	79 375	77 070	75 208	68 318	31 983	17 637	17 305
Payroll, all employees -----	7 277 890	(S)	(S)	246 244	1 051 059	1 243 350	1 431 075	1 519 700	784 107	466 859	422 407
Dollar value of business done -----	49 468 847	(S)	(S)	1 143 457	5 388 101	6 990 032	9 141 410	11 330 461	6 551 829	4 137 402	4 394 049
Value of construction work -----	48 633 331	(S)	(S)	1 130 181	5 326 258	6 892 557	9 012 118	11 120 635	6 417 381	4 048 279	4 297 335
Net value of construction work† -----	33 660 224	(S)	(S)	950 447	4 286 938	5 233 512	6 268 429	7 282 099	4 112 231	2 529 299	2 667 072
Value added†† -----	17 183 012	(S)	(S)	521 302	2 303 718	2 648 690	3 169 932	3 541 134	2 084 178	1 263 457	1 471 040
Cost of materials, components, supplies, and fuels -----	17 312 728	(S)	(S)	442 421	2 045 062	2 682 297	3 227 790	3 950 792	2 162 501	1 354 965	1 292 746
Cost of construction work subcontracted out to others -----	14 973 107	(S)	(S)	(S)	(S)	1 659 045	2 743 689	3 838 535	2 305 150	1 518 980	1 630 263
Rental cost for machinery, equipment, and buildings -----	404 408	(S)	(S)	12 631	55 040	76 655	77 268	95 655	40 547	21 641	19 884
Capital expenditures, other than land -----	461 775	(S)	(S)	21 358	89 691	90 270	87 181	84 654	44 263	20 164	17 100
End-of-year gross book value of depreciable assets -----	3 617 961	(S)	(S)	151 331	585 001	623 753	694 344	745 031	328 882	164 993	264 875
1987											
All employees** -----	396 291	(S)	(S)	(S)	(S)	75 488	73 072	69 062	30 746	13 216	17 097
Value of construction work -----	39 098 146	(S)	(S)	(S)	(S)	5 620 350	7 153 133	9 012 756	5 047 547	2 470 204	4 038 220
Value added†† -----	14 969 716	(S)	(S)	(S)	(S)	2 263 082	2 661 040	3 303 794	1 714 174	881 044	1 518 887
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	2	2	2	2	2	2	3	1
Net value of construction work† -----	1	(S)	(S)	2	1	2	2	2	3	4	2
Capital expenditures, other than land -----	3	(S)	(S)	7	5	6	7	6	10	7	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	48 633 331	29 701 039	13 133 146	2 893 030	1	1	1	2
Building construction	45 666 546	29 665 626	13 119 580	2 881 339	1	1	1	2
Single-family houses	42 788 258	28 593 399	11 731 914	2 462 945	1	1	1	2
Single-family houses, detached	39 583 779	26 638 154	10 789 107	2 156 518	1	1	1	2
Single-family houses, attached, including townhouses and townhouse-type condominiums	3 204 478	1 955 245	942 806	306 427	3	3	4	5
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	566 237	227 762	222 806	115 669	3	7	4	5
Office buildings	588 470	211 425	316 926	60 119	3	6	4	6
Other commercial buildings such as stores, restaurants, and automobile service stations	722 091	269 946	367 017	85 128	4	6	4	6
Industrial buildings and warehouses	277 450	110 051	127 203	40 196	5	7	7	8
Other nonresidential buildings	724 041	253 044	353 714	117 283	3	4	6	4
Nonbuilding construction	60 669	35 413	13 566	11 690	16	26	24	9
Construction work, n.s.k.	2 906 116	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
1987								
Value of construction work	39 098 146	23 737 617	9 674 990	2 101 739	1	1	1	1
Building construction	35 267 533	23 569 318	9 623 099	2 075 116	1	1	1	2
Single-family houses	31 833 307	21 681 563	8 402 804	1 748 940	1	1	1	2
Single-family houses, detached	27 994 892	18 640 661	7 794 766	1 559 465	1	1	1	2
Single-family houses, attached, including townhouses and townhouse-type condominiums	3 838 414	3 040 902	608 038	189 474	3	3	5	6
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	638 197	414 214	152 435	71 547	5	7	6	5
Office buildings	740 709	404 125	289 705	46 878	7	12	4	5
Other commercial buildings such as stores, restaurants, and automobile service stations	875 552	447 716	357 953	69 883	3	4	4	5
Industrial buildings and warehouses	379 143	223 029	119 218	36 896	3	4	5	6
Other nonresidential buildings	800 625	398 669	300 983	100 972	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	246 813	168 299	51 891	26 622	6	7	14	12
Construction work, n.s.k.	3 583 800	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
All establishments -----	107 495	403 754	7 277 890	48 633 331	43 965 873	33 660 224	17 183 012	14 973 107	1	1	1
Establishments not specializing by type -----	2 968	13 616	262 666	1 420 755	(NA)	979 142	558 075	441 612	4	5	6
Establishments specializing 51 percent or more -----	104 528	390 138	7 015 224	47 212 576	43 965 873	32 681 081	16 624 937	14 531 495	1	1	1
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	88 494	329 766	6 153 425	41 787 882	38 911 294	28 779 750	14 416 462	13 008 132	1	1	1
Establishments with —											
100 percent specialization -----	57 978	201 246	3 709 212	27 877 171	27 877 171	19 208 989	9 343 255	8 668 181	1	1	2
90 to 99 percent specialization -----	11 308	45 200	851 808	5 077 187	4 767 733	3 577 190	1 846 782	1 499 997	2	2	3
80 to 89 percent specialization -----	6 723	28 133	531 009	3 002 740	2 481 338	2 020 081	1 062 984	982 658	3	4	5
70 to 79 percent specialization -----	5 640	24 045	444 092	2 558 297	1 875 198	1 756 118	994 888	802 179	3	4	5
60 to 69 percent specialization -----	3 716	17 697	352 137	1 851 044	1 159 583	1 261 552	638 747	589 492	4	4	5
51 to 59 percent specialization -----	3 129	13 446	265 166	1 421 444	750 271	955 819	529 806	465 625	4	4	5
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	4 968	21 337	410 634	2 596 341	2 226 226	1 718 875	972 542	877 466	3	4	6
Establishments with —											
100 percent specialization -----	2 708	10 295	194 562	1 213 308	1 213 308	846 262	502 199	367 046	4	5	8
90 to 99 percent specialization -----	492	2 526	51 390	371 529	350 751	234 834	131 236	136 694	9	6	6
80 to 89 percent specialization -----	358	1 901	36 117	199 459	163 364	142 203	82 484	57 256	11	10	12
70 to 79 percent specialization -----	586	2 515	44 951	263 342	193 128	171 279	90 774	92 063	9	10	12
60 to 69 percent specialization -----	342	1 779	32 327	164 116	102 316	116 528	52 856	47 588	12	13	18
51 to 59 percent specialization -----	482	2 322	51 288	384 587	203 358	207 769	112 994	(S)	9	14	(S)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	107 495	296 236	274 874	301 505	321 730	286 835	(Z)	1	1	1	1	1
Alabama	1 362	3 882	3 653	3 982	4 121	3 774	4	6	6	7	7	7
Alaska	350	811	604	814	1 039	787	6	12	15	13	12	13
Arizona	1 393	5 057	4 708	5 048	5 451	5 021	4	5	5	5	5	5
Arkansas	666	1 442	1 291	1 448	1 493	1 538	6	9	10	10	9	11
California	13 950	38 821	37 899	39 478	41 462	36 447	1	2	2	2	2	2
Colorado	1 651	4 793	4 136	4 772	5 318	4 944	3	4	5	4	5	5
Connecticut	1 646	3 717	3 261	3 883	4 210	3 513	3	4	4	4	4	4
Delaware	458	1 394	1 286	1 401	1 537	1 354	6	8	7	8	9	10
District of Columbia	62	307	262	298	401	267	18	26	24	25	30	24
Florida	5 435	17 623	16 471	17 321	18 577	18 121	2	3	3	4	4	4
Georgia	2 014	5 372	5 135	5 402	5 849	5 101	4	4	5	5	5	5
Hawaii	564	2 460	2 322	2 405	2 452	2 661	6	5	6	6	6	8
Idaho	774	1 917	1 669	2 021	2 099	1 880	5	8	9	9	8	8
Illinois	4 238	11 341	10 303	11 628	12 368	11 066	2	3	3	3	3	3
Indiana	2 824	8 663	7 936	8 897	9 449	8 368	3	4	4	4	4	4
Iowa	1 222	3 470	3 018	3 503	3 989	3 371	4	6	6	6	6	6
Kansas	909	2 767	2 682	2 790	3 017	2 579	5	8	8	8	8	8
Kentucky	1 198	3 227	3 045	3 339	3 454	3 069	4	7	7	7	7	7
Louisiana	807	2 497	2 448	2 604	2 605	2 331	6	8	8	8	9	9
Maine	940	2 459	2 079	2 550	2 870	2 338	4	6	7	6	6	6
Maryland	2 941	9 523	8 979	9 628	10 506	8 981	3	6	6	6	7	5
Massachusetts	2 151	4 916	4 642	5 044	5 333	4 642	3	4	5	4	4	5
Michigan	4 331	11 684	10 005	12 293	13 155	11 282	2	3	3	3	3	3
Minnesota	1 905	4 947	4 263	5 088	5 558	4 880	3	5	5	5	5	5
Mississippi	599	1 675	1 598	1 690	1 790	1 619	6	9	9	9	9	9
Missouri	2 330	7 196	6 915	7 423	7 621	6 825	3	5	5	5	5	5
Montana	645	1 530	1 376	1 411	1 777	1 557	5	9	10	9	9	10
Nebraska	691	1 926	1 724	1 980	2 210	1 791	6	8	9	8	9	8
Nevada	507	1 964	1 910	1 922	2 033	1 993	7	7	7	6	8	7
New Hampshire	728	1 633	1 437	1 595	1 809	1 691	4	7	7	7	7	8
New Jersey	3 394	7 633	7 209	7 699	8 129	7 494	2	4	4	4	4	4
New Mexico	1 015	2 742	2 432	2 647	3 189	2 698	4	7	7	6	11	8
New York	6 638	15 309	13 816	15 514	16 992	14 916	2	3	3	3	3	3
North Carolina	3 365	9 170	9 051	9 321	9 497	8 810	3	4	3	4	4	4
North Dakota	233	797	618	830	915	826	10	14	15	13	14	16
Ohio	4 130	11 699	10 582	12 033	12 836	11 346	2	3	4	3	3	4
Oklahoma	590	1 570	1 394	1 657	1 711	1 520	6	12	13	12	12	13
Oregon	1 868	4 492	4 350	4 666	4 813	4 139	3	5	5	6	5	5
Pennsylvania	5 713	16 777	14 987	17 443	18 474	16 204	2	2	2	2	3	3
Rhode Island	545	1 024	940	1 039	1 108	1 009	5	7	8	8	7	7
South Carolina	1 696	4 936	4 731	5 067	5 155	4 792	4	6	6	6	6	6
South Dakota	321	960	769	936	1 165	971	10	12	12	12	13	13
Tennessee	1 489	3 986	3 705	4 168	4 213	3 857	4	6	6	6	6	6
Texas	3 773	9 782	9 603	9 990	10 170	9 365	3	4	4	4	4	4
Utah	850	2 869	2 512	2 884	3 176	2 906	4	7	8	7	7	7
Vermont	759	2 063	1 675	2 091	2 436	2 051	5	8	9	8	7	7
Virginia	3 654	10 597	10 252	10 804	11 260	10 072	2	3	3	3	3	3
Washington	4 362	9 816	9 595	9 875	10 620	9 175	2	3	4	3	3	4
West Virginia	1 031	2 506	2 173	2 529	2 807	2 514	4	7	7	7	7	7
Wisconsin	2 402	7 246	6 407	7 375	8 113	7 088	3	4	4	4	4	4
Wyoming	377	1 245	1 015	1 280	1 396	1 290	6	9	9	9	9	9

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	48 633 331	107 265	47 555 170	4 486	1 078 161	39 098 146	24.4	1	1	3
Alabama -----	597 204	1 362	562 362	69	34 842	507 951	17.6	7	8	11
Alaska -----	(D)	350	(D)	*12	(D)	119 123	(D)	(D)	(D)	(D)
Arizona -----	823 928	1 389	817 562	28	6 365	610 442	35.0	5	5	16
Arkansas -----	253 409	(S)	240 071	24	13 337	187 437	35.2	12	12	4
California -----	6 202 884	13 939	6 135 649	72	67 236	5 437 379	14.1	2	2	12
Colorado -----	823 288	1 651	808 363	51	(S)	495 721	66.1	6	5	(S)
Connecticut -----	617 319	1 636	610 003	59	7 317	1 004 372	-38.5	5	5	33
Delaware -----	212 135	450	193 630	63	18 506	244 259	-13.2	7	8	11
District of Columbia -----	94 706	(S)	33 399	242	61 306	76 143	24.4	25	30	35
Florida -----	3 897 066	5 419	3 874 736	54	*22 330	3 027 253	28.7	4	4	53
Georgia -----	1 170 508	(S)	1 133 514	53	36 993	932 822	25.5	6	7	4
Hawaii -----	(D)	564	(D)	*31	(D)	277 217	(D)	(D)	(D)	(D)
Idaho -----	295 237	(S)	294 376	*30	*861	84 266	250.4	8	8	48
Illinois -----	1 868 588	4 238	1 837 911	173	30 677	1 409 283	32.6	4	4	25
Indiana -----	1 414 072	2 817	1 406 835	153	7 237	720 619	96.2	5	5	22
Iowa -----	483 386	1 211	474 393	86	8 992	163 358	195.9	8	8	24
Kansas -----	476 984	908	453 105	87	23 879	265 374	79.7	13	14	23
Kentucky -----	547 606	(S)	526 283	134	21 324	242 972	125.4	9	9	12
Louisiana -----	389 591	807	371 990	*27	17 602	225 215	73.0	9	9	19
Maine -----	321 973	940	318 680	50	*3 293	408 730	-21.2	7	7	55
Maryland -----	1 407 242	2 940	1 303 711	271	103 532	1 208 518	16.4	5	5	9
Massachusetts -----	888 510	2 151	868 933	159	19 578	1 501 496	-40.8	5	5	21
Michigan -----	1 734 557	4 331	1 720 109	112	14 448	1 221 136	42.0	4	4	20
Minnesota -----	880 922	1 905	865 804	116	15 118	677 976	29.9	6	6	21
Mississippi -----	(S)	(S)	(S)	56	31 969	201 771	(S)	(S)	(S)	6
Missouri -----	927 722	2 329	903 548	98	24 174	663 941	39.7	6	6	27
Montana -----	202 699	(S)	197 937	47	4 763	64 332	215.1	10	10	14
Nebraska -----	232 295	691	231 239	*25	1 056	(D)	(D)	10	10	25
Nevada -----	513 477	(S)	506 338	53	7 139	252 089	103.7	7	7	24
New Hampshire -----	189 832	726	180 963	141	8 869	500 106	-62.0	6	7	22
New Jersey -----	1 152 688	3 393	1 136 533	198	16 155	1 757 284	-34.4	4	4	24
New Mexico -----	350 999	999	324 218	*18	26 781	232 894	50.7	7	8	1
New York -----	2 187 027	6 617	2 167 235	188	19 792	2 491 694	-12.2	3	3	17
North Carolina -----	1 482 954	3 349	1 448 434	127	34 519	1 348 874	9.9	4	4	14
North Dakota -----	88 447	233	83 630	*20	*4 818	55 802	58.5	13	14	64
Ohio -----	2 004 094	4 124	1 961 313	181	42 782	1 316 411	52.2	4	4	7
Oklahoma -----	311 984	(S)	296 907	*27	15 077	176 752	76.5	12	12	1
Oregon -----	725 181	1 860	720 637	56	4 544	326 764	121.9	6	6	22
Pennsylvania -----	2 556 641	5 701	2 537 771	252	18 870	2 206 526	15.9	3	3	17
Rhode Island -----	134 694	538	126 656	81	8 038	188 205	-28.4	8	9	27
South Carolina -----	808 506	(S)	771 667	43	36 839	665 956	21.4	6	6	17
South Dakota -----	146 478	321	140 310	*15	*6 168	38 864	276.9	15	15	65
Tennessee -----	771 154	1 488	723 688	42	47 466	537 324	43.5	7	7	2
Texas -----	2 380 021	3 770	2 347 374	28	32 647	1 351 348	76.1	5	5	7
Utah -----	395 428	848	394 550	12	*878	161 810	144.4	8	8	42
Vermont -----	220 861	756	211 106	46	*9 755	307 209	-28.1	8	8	49
Virginia -----	1 382 524	3 635	1 345 961	194	36 564	1 279 732	8.0	4	4	12
Washington -----	1 455 364	4 353	1 440 986	75	14 377	749 520	94.2	3	3	11
West Virginia -----	227 071	1 023	211 878	196	15 193	145 993	55.5	8	8	19
Wisconsin -----	1 300 800	2 402	1 296 834	84	3 965	(D)	(D)	5	5	25
Wyoming -----	146 654	377	136 976	27	9 678	46 146	217.8	9	10	5

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business -----	49 468 847	40 105 269	1	1
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS				
General building contractor -----	31 730 766	26 247 501	1	1
General building contractor, remodeling ¹ -----	11 995 016	7 640 348	1	1
Operative builder -----	1 798 217	1 419 244	3	3
Other construction activities -----	361 456	688 971	5	5
OTHER BUSINESS ACTIVITIES				
Building construction on land owned by you, for rent or lease -----	102 767	99 822	9	6
Construction management services -----	103 867	(NA)	10	(NA)
Subdividing and preparing your own land for sale, rent, or lease -----	163 020	100 827	6	10
Other business activities -----	417 628	749 089	4	2
Kind of business activity, n.s.k. -----	2 796 109	3 050 718	2	2

¹In 1987, this item, for the most part, represented the value of residential remodeling general contractor work. For 1992, it represents the value of both residential and nonresidential remodeling general contractor work.

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	3.8	4.4	(Z)
Number of construction workers	2.8	3.4	1
Number of all other employees	1.0	1.0	1
Payroll, all employees \$1,000 ..	67.7	69.4	1
Payroll, construction workers do ..	45.3	48.1	1
Payroll, other employees do ..	22.4	21.3	1
Dollar value of business done do ..	460.2	443.8	1
Value of construction work do ..	452.4	432.6	1
Cost of materials, components, supplies, and fuels do ..	161.1	147.8	1
Construction work subcontracted to others do ..	139.3	130.3	1
Rental cost for machinery, equipment, and buildings do ..	3.8	3.6	3
Capital expenditures, other than land do ..	4.3	5.7	3
Gross book value of depreciable assets do ..	33.7	37.0	2
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	18.0	15.8	(Z)
Dollar value of business done do ..	122.5	101.2	1
Value added†† do ..	42.6	37.8	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	16.4	14.1	(Z)
Value of construction work do ..	164.2	127.2	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	22.4	21.7	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.150	.160	1
Cost of materials, components, supplies, and fuels do ..	.356	.342	(Z)
Cost of construction work subcontracted out to others do ..	.308	.301	1
Value of construction work subcontracted in from others do ..	.038	.078	3
Rental cost for machinery, equipment, and buildings do ..	.008	.008	3

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	3.8	18.0	164.2	.150	.356	.308	.038	.008
Alabama -----	3.9	14.9	145.6	.141	.328	.300	(S)	.010
Alaska -----	3.2	18.5	154.3	.164	.321	.289	*.049	.008
Arizona -----	5.1	15.8	162.9	.137	.284	.395	.055	.009
Arkansas -----	3.0	14.9	167.8	.125	.422	.245	.030	(S)
California -----	3.7	19.8	158.5	.168	.283	.338	.042	.012
Colorado -----	4.1	18.3	171.1	.150	.317	.362	.042	.014
Connecticut -----	3.1	21.8	169.2	.179	.351	.286	.052	.011
Delaware -----	4.1	20.9	145.0	.196	.370	.318	.033	.005
District of Columbia -----	6.7	19.8	118.5	.226	.279	.269	*.048	.006
Florida -----	4.8	17.3	231.0	.112	.356	.363	.031	.006
Georgia -----	3.8	16.8	214.4	.112	.352	.330	.020	.006
Hawaii -----	5.9	27.5	204.2	.181	.279	.331	.057	.015
Idaho -----	3.2	15.8	155.8	.132	.382	.315	.035	.006
Illinois -----	3.7	19.5	163.0	.164	.371	.275	.045	.009
Indiana -----	4.1	17.7	166.3	.142	.421	.243	.026	.006
Iowa -----	3.7	16.6	139.8	.153	.409	.247	.048	.007
Kansas -----	4.1	17.3	178.0	.131	.393	.313	.035	.006
Kentucky -----	3.7	15.0	164.4	.126	.370	.278	.042	.004
Louisiana -----	4.3	14.7	149.2	.136	.385	.310	.040	.011
Maine -----	3.6	16.6	130.3	.174	.346	.259	.061	.011
Maryland -----	4.4	18.9	145.8	.175	.337	.262	.033	.006
Massachusetts -----	3.1	20.5	178.7	.158	.363	.311	.041	(S)
Michigan -----	3.7	17.9	147.6	.165	.370	.292	.039	.007
Minnesota -----	3.5	18.4	176.8	.141	.361	.340	.034	.005
Mississippi -----	3.5	14.8	(S)	(S)	(S)	(S)	(S)	(S)
Missouri -----	4.0	16.6	128.9	.167	.389	.265	.053	.008
Montana -----	2.9	15.6	131.4	.146	.458	.283	(S)	.006
Nebraska -----	3.6	15.6	123.4	.164	.418	.235	(S)	.008
Nevada -----	5.1	22.4	258.5	.115	.207	.513	.026	.012
New Hampshire -----	3.0	16.3	121.1	.179	.387	.255	.074	.011
New Jersey -----	3.0	19.7	151.0	.176	.350	.251	.057	.009
New Mexico -----	3.5	14.3	119.8	.153	.365	.272	.029	.008
New York -----	3.2	18.4	142.8	.176	.364	.260	.044	.008
North Carolina -----	3.7	16.2	159.5	.138	.410	.282	.034	.008
North Dakota -----	4.2	14.6	109.7	.163	.382	.231	.036	(S)
Ohio -----	3.8	18.2	170.0	.146	.387	.282	.027	.007
Oklahoma -----	3.8	16.2	190.3	.123	.321	.293	*.030	(S)
Oregon -----	3.4	18.0	164.1	.154	.339	.327	.052	.012
Pennsylvania -----	3.9	18.2	156.0	.157	.381	.293	.034	.009
Rhode Island -----	2.5	18.4	128.6	.193	.341	.257	.066	(S)
South Carolina -----	3.9	15.8	157.6	.134	.394	.314	.038	.007
South Dakota -----	3.6	15.2	147.0	.123	.396	.243	*.024	*.011
Tennessee -----	3.7	16.2	183.9	.121	.425	.297	.020	.005
Texas -----	4.0	18.0	257.4	.109	.380	.346	.037	.006
Utah -----	4.3	16.3	144.7	.144	.333	.311	.035	.005
Vermont -----	3.6	15.3	105.7	.190	.364	.240	(S)	.007
Virginia -----	3.9	16.8	132.4	.172	.370	.277	.030	.008
Washington -----	3.0	18.5	148.2	.165	.335	.298	.041	.013
West Virginia -----	3.0	13.4	88.1	.191	.415	(S)	.033	.008
Wisconsin -----	4.0	19.3	182.1	.140	.380	.343	.031	.006
Wyoming -----	4.0	17.0	110.3	.189	.398	.267	.036	(S)

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

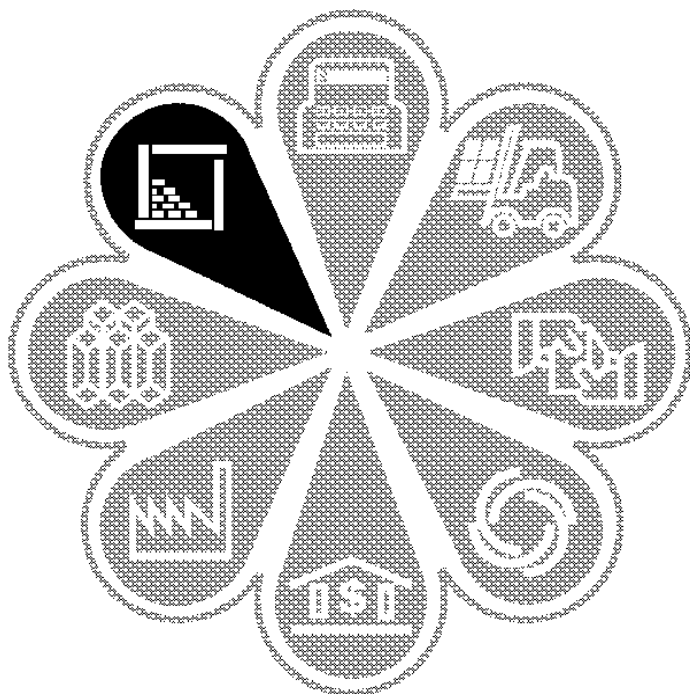
Census of Construction Industries

CC92-I-2

INDUSTRY SERIES

General Contractors— Residential Buildings, Other Than Single-Family Houses

Industry 1522



1992 Census of Construction Industries

CC92-I-2

INDUSTRY SERIES

General Contractors— Residential Buildings, Other Than Single-Family Houses

Industry 1522

Issued April 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



**Economics and Statistics
Administration**

Everett M. Ehrlich, Under Secretary
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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year— buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

Contents

General Contractors— Residential Buildings, Other Than Single-Family Houses

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appears as part of the number of each page]

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Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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Summary of Findings

Establishments classified in this industry are primarily engaged in the construction of apartments, apartment-type condominiums, cooperatives, hotels, motels, and dormitories (including new work, additions, alterations, remodeling, and repair). For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$8.0 billion in total dollar value of business. Of this amount, \$7.8 billion were for the value of construction work. These establishments paid out \$1.9 billion for materials, components, and supplies and \$3.5 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$71.0 million. Value added for 1992 was \$2.5 billion.

There were 6,490 establishments with total employment averaging 48,803 during the year. Total payroll for 1992 was \$1.2 billion.

Larger establishments with 20 employees or more, while representing only 8 percent of the total number of

employer establishments in this industry accounted for 53 percent of all business done.

A “construction establishment” is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

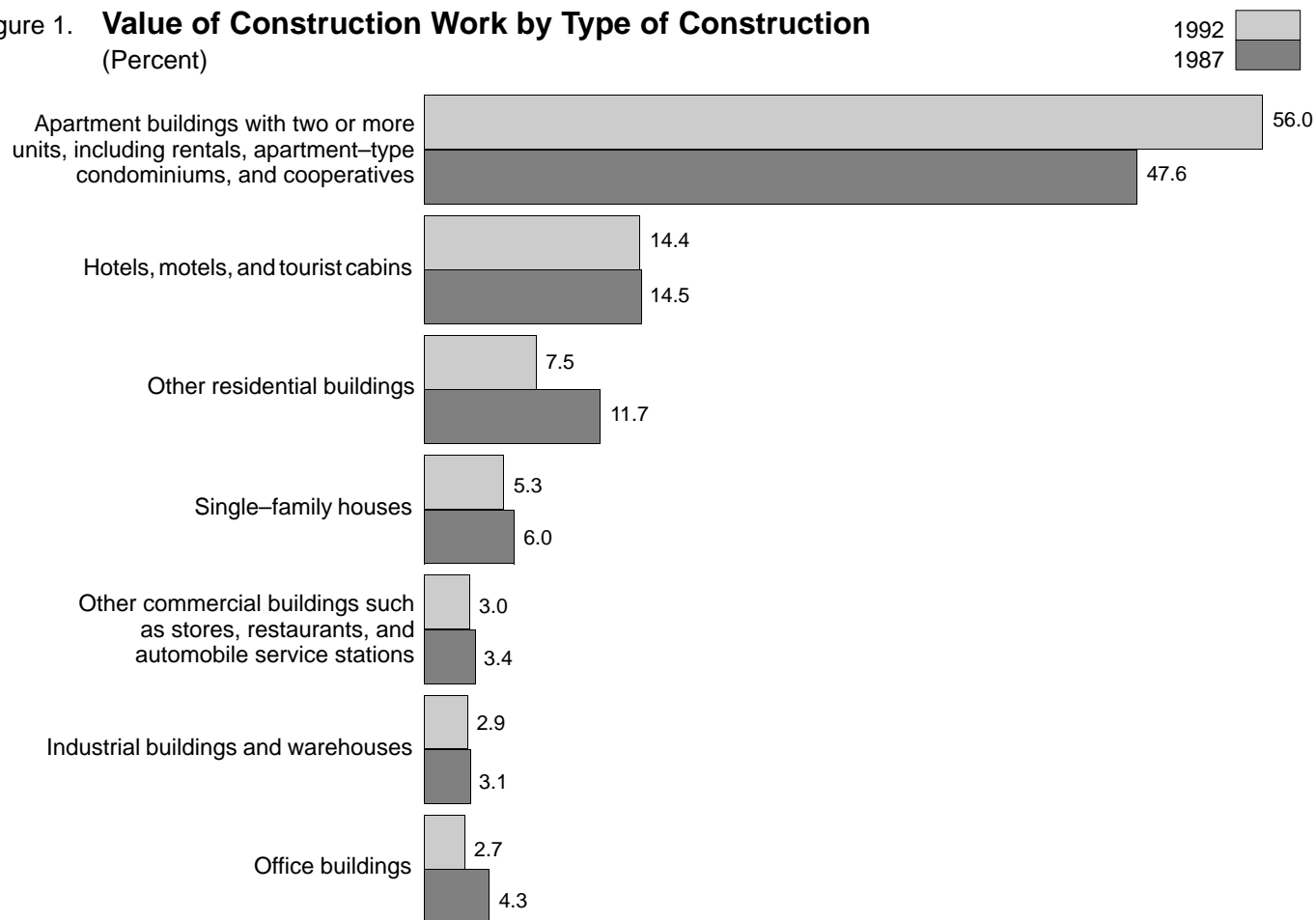


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

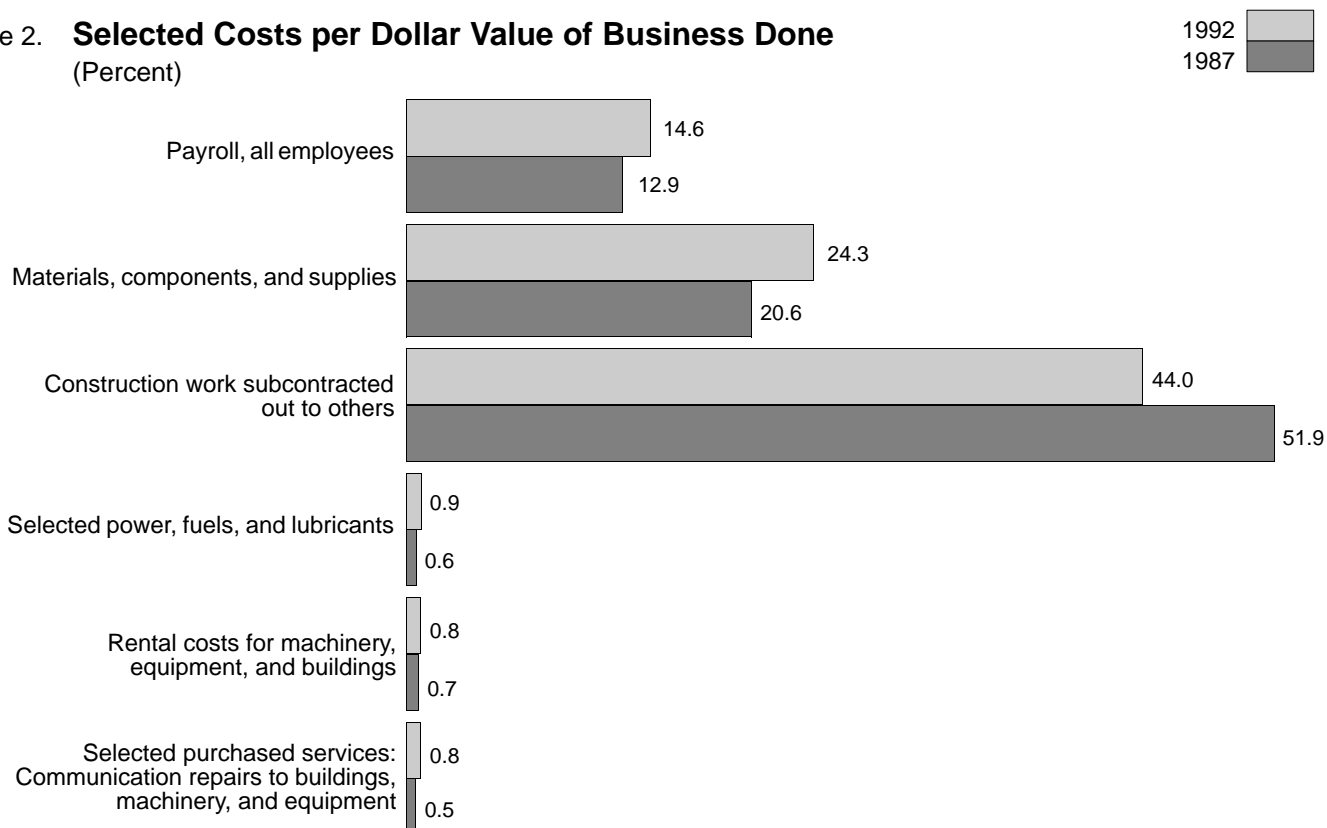


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	6 490	48 803	35 107	1 160 562	717 595	7 834 956	4 337 918	2 453 669	2 003 300
Alabama -----	60	709	556	13 007	8 401	95 730	51 181	24 558	27 314
Alaska -----	6	242	190	8 537	5 698	36 728	26 226	22 113	4 394
Arizona -----	55	540	384	8 857	4 929	66 307	37 850	23 030	15 241
Arkansas -----	34	333	192	6 356	3 518	58 054	29 554	(S)	20 682
California -----	963	6 301	4 630	144 755	92 554	1 073 011	614 677	329 950	296 374
Colorado -----	85	729	494	17 481	9 519	96 312	48 320	28 676	22 811
Connecticut -----	69	276	216	6 373	3 840	49 096	27 541	14 235	13 642
Delaware -----	21	217	152	(D)	2 765	15 074	(D)	7 882	(D)
District of Columbia -----	*13	*50	*39	505	324	2 229	1 992	1 647	*345
Florida -----	325	4 079	2 654	86 423	44 251	685 919	317 175	189 985	159 677
Georgia -----	115	1 389	798	30 000	18 557	234 518	127 609	69 322	59 525
Hawaii -----	47	2 696	2 056	98 415	70 568	569 705	(D)	169 016	(D)
Idaho -----	23	122	*76	2 440	1 177	24 810	13 470	4 661	*8 869
Illinois -----	305	1 595	1 103	43 240	25 236	280 342	148 621	87 584	62 246
Indiana -----	236	1 083	743	19 862	13 074	127 589	75 569	47 013	30 430
Iowa -----	67	322	232	5 523	3 785	*52 020	18 242	18 862	5 049
Kansas -----	53	560	481	12 966	9 114	64 641	41 628	20 875	21 133
Kentucky -----	68	577	478	10 540	7 524	61 334	41 035	23 563	17 612
Louisiana -----	72	458	332	9 387	5 869	39 988	29 491	18 512	11 250
Maine -----	46	116	95	1 457	980	8 749	6 616	3 854	3 026
Maryland -----	185	1 117	754	27 252	13 594	187 961	81 586	60 852	23 169
Massachusetts -----	168	782	550	21 315	13 311	111 335	71 027	42 173	31 599
Michigan -----	197	1 342	924	27 306	16 854	195 818	120 280	65 905	56 686
Minnesota -----	64	429	283	11 161	5 629	111 698	42 298	22 925	19 462
Mississippi -----	37	416	349	5 412	4 022	29 203	20 177	12 498	7 679
Missouri -----	170	900	(S)	18 125	10 882	(S)	(S)	(D)	47 432
Montana -----	41	167	138	2 458	1 833	19 207	12 722	7 271	5 451
Nebraska -----	48	396	318	6 796	4 786	33 633	23 372	17 173	7 038
Nevada -----	59	880	702	31 622	24 792	287 459	105 060	52 301	53 976
New Hampshire -----	26	115	88	3 315	1 868	*11 333	8 019	7 313	1 384
New Jersey -----	213	1 438	1 072	44 818	26 770	249 688	175 532	106 392	71 674
New Mexico -----	28	*134	93	1 734	1 332	11 012	7 687	3 137	*4 745
New York -----	791	5 273	3 721	134 785	81 135	830 709	482 065	277 090	214 158
North Carolina -----	69	587	432	10 654	6 502	62 890	38 510	19 877	19 119
North Dakota -----	*19	221	171	4 134	2 366	21 886	14 802	8 042	6 776
Ohio -----	222	1 642	1 163	43 213	21 796	239 739	125 916	76 021	60 672
Oklahoma -----	22	121	101	1 714	1 395	9 770	7 033	4 543	2 490
Oregon -----	148	947	726	24 080	17 207	117 189	64 013	38 951	29 224
Pennsylvania -----	185	1 377	977	(D)	19 464	228 035	137 158	(S)	58 305
Rhode Island -----	49	135	100	2 654	1 711	18 650	10 964	7 931	4 144
South Carolina -----	72	422	294	9 441	5 369	(S)	30 405	16 531	14 052
South Dakota -----	37	284	211	5 588	3 550	44 698	25 061	11 897	13 410
Tennessee -----	80	848	641	15 528	9 541	121 928	66 958	31 567	35 552
Texas -----	255	2 357	1 745	48 937	29 691	431 541	235 859	132 976	103 593
Utah -----	43	210	150	3 349	2 428	17 197	11 408	*6 612	6 209
Vermont -----	*11	*22	*21	*463	*449	*1 499	*1 384	(D)	(D)
Virginia -----	167	1 345	960	27 651	17 363	204 247	117 718	65 826	53 803
Washington -----	220	1 236	937	27 785	20 359	200 587	126 482	59 653	68 868
West Virginia -----	*28	*84	*75	*1 095	*906	*5 526	*4 667	*2 681	*2 139
Wisconsin -----	158	1 118	843	25 083	17 881	155 174	95 779	43 145	55 629
Wyoming -----	*13	*67	*58	*1 525	*1 131	*6 148	*3 350	*2 643	767

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
3 497 038	336 678	61 732	51 654	487 125	81 708	13 315 544	3 658 560	2	2	6	U.S.
44 550	4 254	1 100	(S)	(S)	532	85 780	24 498	11	8	(S)	AL
10 502	—	339	905	1 531	185	29 761	9 926	(Z)	(Z)	(Z)	AK
28 456	*1 665	494	(S)	1 775	1 278	381 213	64 659	10	17	(S)	AZ
28 500	39	251	656	5 408	419	54 947	23 019	10	10	10	AR
458 334	71 425	7 258	7 751	43 935	10 971	2 011 150	560 032	4	4	14	CA
47 992	*3 134	692	1 076	3 446	987	251 154	52 584	14	13	19	CO
21 555	1 862	467	136	*5 619	1 540	304 677	103 462	21	19	23	CT
(D)	48	(S)	163	(D)	510	48 994	15 676	4	(D)	(Z)	DE
*237	23	3	—	(S)	(S)	(S)	(S)	60	31	—	DC
368 744	28 190	4 809	3 065	18 730	6 936	1 042 664	248 104	8	6	31	FL
106 908	6 311	1 807	(S)	(S)	1 842	266 475	88 981	9	12	(S)	GA
(D)	8 127	7 847	4 122	(D)	2 621	627 441	129 294	3	(D)	4	HI
11 340	(S)	*433	*145	415	(S)	(S)	(S)	39	35	66	ID
131 721	2 516	1 708	2 195	23 893	2 489	355 627	94 023	9	8	31	IL
52 020	(S)	(S)	*627	8 528	1 574	210 382	57 419	15	17	74	IN
*33 778	(S)	*207	202	*5 801	472	59 658	15 625	23	20	11	IA
23 013	(S)	482	621	(S)	460	86 522	13 296	9	12	32	KS
20 299	294	428	*509	2 697	990	105 280	36 244	17	18	46	KY
10 496	(S)	718	230	3 713	658	77 240	22 880	18	12	24	LA
2 133	538	68	*86	408	787	103 294	33 702	28	27	56	ME
106 374	3 683	1 279	1 058	10 251	2 373	380 352	118 978	11	6	22	MD
40 308	*5 284	*1 801	*1 479	14 152	3 985	885 953	210 180	14	12	61	MA
75 538	*28 660	1 393	830	7 516	1 802	213 441	74 627	11	12	35	MI
69 401	870	273	320	4 246	1 022	277 994	69 102	7	5	12	MN
9 026	*311	*180	*268	*2 127	436	66 271	18 085	31	29	46	MS
(S)	834	1 059	982	(S)	1 271	205 348	46 160	18	(S)	39	MO
6 485	460	(S)	*231	1 091	160	32 855	*9 678	30	22	74	MT
10 261	(S)	*220	*482	*3 455	176	27 567	5 199	27	26	50	NE
182 399	7 336	1 602	990	12 885	676	236 989	32 744	7	6	32	NV
*3 315	408	*208	*250	*3 110	1 232	143 207	50 741	27	34	63	NH
74 156	*21 429	2 711	*947	23 535	2 477	336 878	113 019	10	9	64	NJ
*3 325	(S)	*114	(S)	(S)	(S)	(S)	(S)	40	35	(S)	NM
348 643	24 306	7 519	5 699	46 798	6 378	943 638	321 663	6	6	17	NY
24 380	2 236	467	(S)	3 701	2 492	327 687	86 421	14	15	(S)	NC
7 083	*389	*185	256	2 174	307	52 419	17 193	22	18	35	ND
113 824	7 531	2 272	2 390	18 168	3 447	437 647	148 958	9	10	13	OH
2 738	*133	29	73	1 168	250	28 203	*9 023	34	18	23	OK
53 175	(S)	442	*1 400	5 789	837	96 020	22 586	25	13	50	OR
90 877	(S)	(S)	(S)	(S)	3 113	294 118	115 171	10	11	(S)	PA
*7 686	2 611	*360	*335	2 237	352	84 692	18 048	30	26	50	RI
(S)	(S)	491	(S)	*3 715	1 300	199 197	36 859	20	22	(S)	SC
19 637	(S)	*383	*307	*4 992	329	55 778	16 850	28	28	66	SD
54 970	*3 352	905	827	6 930	1 954	400 517	95 792	20	12	39	TN
195 681	*29 402	2 478	2 139	16 808	3 049	476 460	126 529	7	8	17	TX
5 789	*798	127	483	1 285	283	32 014	15 853	29	19	22	UT
(S)	—	(S)	*102	(S)	409	45 988	13 201	50	62	67	VT
86 529	*8 645	1 434	*534	7 217	2 421	340 988	88 372	10	32	44	VA
74 105	8 685	1 513	1 728	24 639	1 586	258 313	79 291	10	13	33	WA
*860	(S)	(S)	—	(S)	302	25 915	8 993	47	63	—	WV
59 395	4 603	935	*1 902	*22 488	1 694	266 351	76 619	15	17	44	WI
(S)	—	*32	—	(S)	*107	10 690	4 076	68	55	—	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	6 490	8 143	7 464	4 775	3	2	1	3
Proprietors and working partners	2 177	1 545	1 121	2 122	5	7	6	6
All employees**	48 803	81 708	62 702	55 589	2	1	1	1
Construction workers:								
March	33 802	60 123	49 370	40 564	2	2	1	1
May	36 735	61 354	49 973	45 565	2	2	1	1
August	36 607	64 437	50 094	49 938	2	1	1	1
November	33 284	59 098	48 695	46 614	2	2	1	1
Average	35 107	61 245	50 089	45 707	2	1	1	1
Other employees:								
March	13 909	19 813	12 598	9 208	2	2	1	2
May	13 789	20 593	(NA)	(NA)	2	2	(NA)	(NA)
August	13 525	21 095	(NA)	(NA)	2	2	(NA)	(NA)
November	13 561	20 315	(NA)	(NA)	2	2	(NA)	(NA)
Average	13 696	20 462	(NA)	(NA)	2	1	(NA)	(NA)
Payroll, all employees	1 160 562	1 751 693	1 077 525	646 375	1	1	1	1
Payroll, construction workers	717 595	1 130 329	759 607	484 890	2	1	1	1
Payroll, other employees	442 967	621 364	317 917	161 485	2	1	1	2
First-quarter payroll, all employees	272 454	398 783	258 097	135 285	3	1	1	1
Fringe benefits, all employees	271 248	354 377	201 018	119 442	2	1	1	1
Legally required expenditures	212 168	264 878	147 823	74 468	2	2	1	1
Voluntary expenditures	59 081	89 499	53 194	44 974	3	2	1	1
Dollar value of business done	7 954 007	13 592 992	7 953 314	4 514 747	2	1	1	1
Value of construction work	7 834 956	13 315 544	7 846 146	4 442 110	2	1	1	1
Value of construction work subcontracted in from others	336 678	707 613	291 813	110 648	10	6	(NA)	(NA)
Other business receipts	119 051	277 448	107 167	72 637	5	5	2	5
Net value of construction work†	4 337 918	6 257 443	3 570 085	2 202 760	2	1	1	1
Value added††	2 453 669	3 658 560	1 950 601	1 144 584	2	1	1	1
Selected costs	5 500 338	9 934 432	6 002 712	3 370 163	2	1	1	1
Materials, components, and supplies	1 932 265	2 796 294	1 659 617	1 084 421	2	2	1	1
Construction work subcontracted out to others	3 497 038	7 058 100	4 276 061	2 239 350	2	2	1	1
Selected power, fuels, and lubricants	71 035	80 036	67 033	46 392	3	2	1	2
Electricity	19 056	19 832	26 954	10 100	4	2	1	4
Natural and manufactured gas	3 023	2 867	3 063	4 350	5	4	3	2
Gasoline and diesel fuel	45 389	52 123	31 850	22 312	4	2	2	2
On highway use	37 968	46 602	(NA)	(NA)	4	2	(NA)	(NA)
Off highway use	7 422	5 521	(NA)	(NA)	9	4	(NA)	(NA)
Other, including lubricating oils and greases	3 566	5 213	5 165	9 629	10	4	4	2
Rental cost for machinery, equipment, and buildings	61 732	94 009	54 779	34 448	4	2	1	1
For machinery and equipment	33 710	60 878	41 837	28 570	5	3	1	1
For buildings	28 022	33 131	12 942	5 878	5	3	2	2
Selected purchased services	64 478	73 069	47 462	33 389	4	2	1	2
Communication services	32 918	31 584	19 252	14 717	7	2	2	2
Repairs to buildings and other structures	3 317	4 827	3 711	4 291	7	8	5	11
Repairs to machinery and equipment	28 243	36 658	24 499	14 381	4	3	2	2
Ownership of construction projects:								
Value of construction work	7 834 956	13 315 544	7 846 146	4 442 110	2	1	1	1
Government owned	1 483 444	1 580 470	1 220 146	1 009 153	4	3	3	1
Federal	546 139	578 916	(NA)	(NA)	6	5	(NA)	(NA)
State and local	937 305	1 001 554	(NA)	(NA)	6	3	(NA)	(NA)
Privately owned	6 351 512	11 735 073	6 626 000	3 432 597	4	2	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	457 704	636 639	5	3
Capital expenditures, other than land -----	51 654	92 709	6	4
New -----	41 923	68 086	6	4
Used -----	9 731	24 622	9	6
Retirements and disposition of depreciable assets -----	22 233	66 164	19	5
End-of-year gross book value of depreciable assets -----	487 125	663 184	5	3
Depreciation charges during year -----	53 443	76 844	6	4
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	103 889	206 835	14	9
Capital expenditures, other than land -----	7 757	22 191	14	8
New buildings and other structures -----	6 191	12 633	17	9
Used buildings and other structures -----	1 565	9 557	15	13
Retirements and disposition of depreciable assets -----	*7 014	18 095	56	14
End-of-year gross book value of depreciable assets -----	104 632	210 932	11	9
Depreciation charges during year -----	7 439	15 059	12	4
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	353 815	429 803	5	2
Capital expenditures, other than land -----	43 898	70 517	6	4
New machinery and equipment, including automobiles and trucks -----	35 732	55 453	7	5
New automobiles and trucks, intended primarily for highway use -----	13 300	28 623	13	5
Used machinery and equipment, including automobiles and trucks -----	8 166	15 064	10	6
Retirements and disposition of depreciable assets -----	15 218	48 069	11	3
End-of-year gross book value of depreciable assets -----	382 494	452 252	5	2
Depreciation charges during year -----	46 004	61 785	6	5

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	6 490	3
Value of construction work	7 834 956	2
Establishments with inventories:		
Number	1 342	4
Value of construction work	1 734 946	4
Inventories ¹ :		
End of 1992, materials and supplies	25 230	18
End of 1991, materials and supplies	25 509	16
Establishments with no inventories:		
Number	2 713	3
Value of construction work	4 202 608	2
Establishments not reporting:		
Number	2 435	3
Value of construction work	1 897 401	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	6 490	4 018	1 304	675	385	71	28	5	3	1
All employees** -----	48 803	7 508	8 162	8 778	10 974	4 674	3 841	1 568	3 299	(D)
Payroll, all employees -----	1 160 562	137 452	168 130	203 580	286 743	118 840	93 855	51 520	100 442	(D)
Dollar value of business done -----	7 954 007	1 155 990	1 060 164	1 531 326	1 961 700	659 796	617 118	340 775	627 139	(D)
Value of construction work -----	7 834 956	1 142 145	1 046 725	1 513 570	1 934 243	651 496	603 207	338 097	605 473	(D)
Net value of construction work† -----	4 337 918	755 838	644 839	793 477	974 687	378 723	286 994	173 161	330 198	(D)
Value added†† -----	2 453 669	403 914	371 936	445 869	571 534	229 783	167 318	75 379	187 936	(D)
Cost of materials, components, supplies, and fuels -----	2 003 300	365 769	286 343	365 364	430 610	157 240	133 587	100 460	163 928	(D)
Cost of construction work subcontracted out to others -----	3 497 038	386 307	401 885	720 093	959 556	272 773	316 213	164 936	275 275	(D)
Rental cost for machinery, equipment, and buildings -----	61 732	10 450	9 188	11 816	12 448	5 773	3 995	8 061	(D)	(D)
Capital expenditures, other than land -----	51 654	7 513	9 378	8 002	11 550	4 962	3 073	7 176	(D)	(D)
End-of-year gross book value of depreciable assets -----	487 125	94 219	79 611	83 121	110 144	35 821	22 870	61 340	(D)	(D)
1987										
All employees** -----	81 708	8 854	11 343	13 790	19 839	10 211	9 184	5 316	3 167	(D)
Value of construction work -----	13 315 544	1 223 349	1 487 680	2 036 435	3 280 403	2 054 702	1 807 609	1 425 363	(D)	(D)
Value added†† -----	3 658 560	400 766	449 433	624 506	868 646	494 138	499 708	321 360	(D)	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	2	5	6	5	4	4	(Z)	(Z)	(Z)	(D)
Net value of construction work† -----	2	7	6	5	3	2	(Z)	(Z)	(Z)	(D)
Capital expenditures, other than land -----	6	19	17	13	10	1	(Z)	(Z)	(D)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	6 490	(S)	(S)	791	1 348	1 232	889	711	291	204	123
All employees** -----	48 803	(S)	(S)	1 186	3 949	5 667	5 913	8 299	5 814	6 223	10 855
Payroll, all employees -----	1 160 562	(S)	(S)	16 238	54 616	95 553	118 017	189 252	142 163	176 877	359 672
Dollar value of business done -----	7 954 007	(S)	(S)	59 683	223 972	432 275	609 889	1 077 740	1 040 606	1 389 902	3 096 612
Value of construction work -----	7 834 956	(S)	(S)	59 108	220 618	424 856	601 720	1 060 939	1 027 302	1 368 135	3 049 221
Net value of construction work† -----	4 337 918	(S)	(S)	50 353	178 660	326 756	417 299	684 514	588 563	695 680	1 377 070
Value added†† -----	2 453 669	(S)	(S)	30 994	105 784	195 827	237 877	387 531	334 418	395 736	753 979
Cost of materials, components, supplies, and fuels -----	2 003 300	(S)	(S)	19 934	76 230	138 348	187 591	313 782	267 448	321 712	670 482
Cost of construction work subcontracted out to others -----	3 497 038	(S)	(S)	(S)	41 958	98 100	184 421	376 426	438 740	672 454	1 672 151
Rental cost for machinery, equipment, and buildings -----	61 732	(S)	(S)	504	3 269	5 942	6 320	10 002	9 407	8 449	17 585
Capital expenditures, other than land -----	51 654	(S)	(S)	422	3 142	5 810	4 379	11 338	7 724	5 407	13 347
End-of-year gross book value of depreciable assets -----	487 125	(S)	(S)	6 139	34 486	39 067	51 919	101 278	70 372	51 638	129 184
1987											
All employees** -----	81 708	(S)	(S)	(S)	5 878	7 270	8 351	15 213	9 773	8 973	23 688
Value of construction work -----	13 315 544	(S)	(S)	(S)	314 711	494 606	656 984	1 737 500	1 514 659	1 865 065	6 648 436
Value added†† -----	3 658 560	(S)	(S)	(S)	138 399	218 570	280 059	598 267	465 918	487 124	1 426 796
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	(S)	(S)	10	8	7	7	6	5	3	1
Net value of construction work† -----	2	(S)	(S)	9	7	6	7	6	6	7	1
Capital expenditures, other than land -----	6	(S)	(S)	39	25	25	21	15	8	5	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

2-8 RESIDENTIAL CONSTRUCTION, N.E.C.

CONSTRUCTION—INDUSTRY SERIES

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	7 834 956	4 677 785	2 427 709	524 448	2	2	3	5
Building construction	7 534 116	4 588 564	2 423 864	521 688	2	2	3	5
Single-family houses	417 672	249 075	131 199	37 398	5	6	7	15
Single-family houses, detached	275 144	150 042	96 801	28 301	6	7	9	19
Single-family houses, attached, including townhouses and townhouse-type condominiums	142 528	99 032	34 398	9 097	7	10	9	16
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	4 389 496	2 627 355	1 420 972	341 169	3	4	3	6
Other residential buildings, including hotels, motels, and tourist cabins	1 715 621	1 090 000	538 634	86 987	3	3	6	11
Hotels, motels, and tourist cabins	1 129 016	862 363	241 169	25 483	3	3	11	10
Other residential buildings	586 605	227 637	297 465	61 503	6	9	8	16
Office buildings	211 913	109 136	84 271	18 506	4	2	6	23
Other commercial buildings such as stores, restaurants, and automobile service stations	236 955	139 526	81 314	16 116	4	4	7	31
Industrial buildings and warehouses	227 982	154 139	62 558	11 285	5	6	8	11
Industrial buildings	183 064	125 189	49 235	8 639	4	5	10	14
Warehouses	44 919	28 949	13 323	2 646	17	26	6	13
Educational buildings	137 649	92 172	40 012	5 465	3	3	7	18
Hospitals and institutional buildings	70 068	31 444	36 930	1 694	6	7	9	18
Amusement, social, and recreational buildings, indoors	59 720	51 476	7 808	436	3	3	11	19
Other nonresidential buildings	67 041	44 243	20 166	2 632	8	11	12	27
Nonbuilding construction	95 826	89 221	*3 845	2 760	5	4	48	20
Construction work, n.s.k.	205 013	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
1987								
Value of construction work	13 315 544	9 899 515	2 505 802	468 066	1	2	2	6
Building construction	12 657 587	9 806 138	2 395 562	455 886	1	2	3	12
Single-family houses	793 845	623 463	148 383	21 998	3	3	6	9
Single-family houses, detached	550 459	410 225	121 923	18 310	3	3	7	10
Single-family houses, attached, including townhouses and townhouse-type condominiums	243 385	213 238	26 459	3 688	6	7	8	18
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	6 337 325	5 032 530	1 036 343	268 451	2	2	4	19
Other residential buildings, including hotels, motels, and tourist cabins	3 498 516	2 674 785	719 296	104 434	2	2	5	8
Hotels, motels, and tourist cabins	1 935 923	1 645 952	260 770	29 200	2	2	6	8
Other residential buildings	1 562 592	1 028 832	458 526	75 233	4	4	7	11
Office buildings	568 310	408 123	145 278	14 908	2	2	6	10
Other commercial buildings such as stores, restaurants, and automobile service stations	458 515	344 167	100 703	13 643	2	3	3	9
Industrial buildings and warehouses	411 569	323 904	72 517	15 147	2	2	4	10
Industrial buildings	274 948	210 470	53 238	11 239	2	2	4	13
Warehouses	136 620	113 433	19 278	3 908	3	3	9	9
Educational buildings	192 030	133 492	53 511	5 026	1	1	2	11
Hospitals and institutional buildings	226 390	147 742	73 749	4 897	2	2	2	29
Amusement, social, and recreational buildings, indoors	65 801	52 955	12 221	624	7	7	20	38
Other nonresidential buildings	105 286	64 977	33 561	6 758	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	215 796	93 377	110 240	12 179	4	6	2	11
Construction work, n.s.k.	442 159	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
				D	E						
All establishments -----	6 490	48 803	1 160 562	7 834 956	5 775 409	4 337 918	2 453 669	3 497 038	2	2	2
Establishments not specializing by type -----	533	4 605	121 230	853 403	(NA)	427 230	242 073	426 173	6	5	6
Establishments specializing 51 percent or more -----	5 957	44 198	1 039 332	6 981 553	5 775 409	3 910 688	2 211 595	3 070 865	2	2	2
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type -----	3 877	30 029	701 647	4 887 966	4 130 863	2 719 328	1 526 801	2 168 638	2	2	3
Establishments with —											
100 percent specialization -----	1 712	12 742	285 465	2 081 512	2 081 512	1 208 007	689 049	873 505	3	5	5
90 to 99 percent specialization -----	488	3 401	76 413	575 347	537 706	308 458	148 189	266 889	8	7	7
80 to 89 percent specialization -----	290	3 041	75 943	494 915	411 905	254 962	141 057	239 953	5	6	6
70 to 79 percent specialization -----	503	4 097	102 355	650 486	481 646	385 394	236 010	265 092	6	5	5
60 to 69 percent specialization -----	432	3 090	71 941	421 126	261 342	251 254	148 547	169 872	10	7	8
51 to 59 percent specialization -----	452	3 658	89 530	664 580	356 751	311 254	163 948	353 327	8	6	5
HOTELS, MOTELS, AND TOURIST CABINS											
All establishments specializing in type -----	414	6 616	191 311	1 283 960	935 846	636 866	352 807	647 094	4	3	5
Establishments with —											
100 percent specialization -----	167	1 348	31 104	276 638	276 638	136 941	81 978	139 697	5	9	13
90 to 99 percent specialization -----	44	587	18 268	117 672	111 198	58 291	40 038	59 381	17	23	35
80 to 89 percent specialization -----	9	450	18 195	(D)	(D)	31 293	5 579	(D)	3	(D)	(D)
70 to 79 percent specialization -----	57	675	15 561	(D)	(D)	41 818	30 022	(D)	19	(D)	(D)
60 to 69 percent specialization -----	64	904	21 361	137 896	87 355	103 111	49 351	34 784	14	6	8
51 to 59 percent specialization -----	72	2 652	86 821	495 916	254 441	265 412	145 839	230 504	4	3	5
OTHER RESIDENTIAL BUILDINGS											
All establishments specializing in type -----	1 214	5 359	109 475	625 096	524 168	431 571	250 837	193 525	6	6	7
Establishments with —											
100 percent specialization -----	877	3 282	63 565	311 311	311 311	237 455	131 820	73 857	8	8	8
90 to 99 percent specialization -----	64	505	10 840	49 296	46 284	32 243	21 067	17 052	29	27	36
80 to 89 percent specialization -----	35	*92	*1 050	8 463	7 160	7 698	*4 122	766	47	32	32
70 to 79 percent specialization -----	90	464	10 021	77 532	55 662	40 345	20 698	37 187	24	29	26
60 to 69 percent specialization -----	89	649	12 773	103 312	64 194	74 154	50 046	29 159	13	12	10
51 to 59 percent specialization -----	(S)	367	11 226	75 181	39 558	39 677	23 083	35 504	16	10	8

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	6 490	35 107	33 802	36 735	36 607	33 284	3	2	2	2	2	2
Alabama	60	556	687	583	528	427	21	12	16	11	15	17
Alaska	6	190	167	234	193	167	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Arizona	55	384	417	434	367	318	29	12	12	12	12	12
Arkansas	34	192	174	199	200	194	25	13	17	13	10	11
California	963	4 630	4 788	5 029	4 851	3 852	6	4	5	5	5	5
Colorado	85	494	444	463	549	519	21	14	15	13	13	15
Connecticut	69	216	227	201	237	200	21	25	27	22	26	25
Delaware	21	152	150	154	166	136	27	4	7	4	10	(Z)
District of Columbia	*13	*39	*72	*32	*40	*12	58	58	73	47	56	63
Florida	325	2 654	2 587	2 537	2 650	2 843	11	8	8	8	8	11
Georgia	115	798	722	883	814	774	17	12	14	10	13	15
Hawaii	47	2 056	2 161	2 053	2 003	2 008	24	3	1	2	4	7
Idaho	23	*76	*72	*90	*76	*64	36	40	42	40	40	42
Illinois	305	1 103	1 094	1 145	1 169	1 006	12	9	8	9	10	9
Indiana	236	743	664	679	818	810	15	17	17	17	18	19
Iowa	67	232	207	264	240	216	25	23	21	27	22	28
Kansas	53	481	428	534	533	428	29	9	10	9	7	9
Kentucky	68	478	423	540	498	451	23	18	18	17	20	18
Louisiana	72	332	357	310	348	312	24	18	16	16	17	29
Maine	46	95	78	90	136	75	34	33	37	33	36	36
Maryland	185	754	554	702	790	971	15	13	11	11	12	22
Massachusetts	168	550	457	551	606	587	16	15	18	16	15	14
Michigan	197	924	904	975	1 029	790	13	12	11	11	13	12
Minnesota	64	283	230	327	323	250	22	7	5	9	9	5
Mississippi	37	349	354	383	387	274	37	32	35	30	34	30
Missouri	170	(S)	(S)	(S)	559	(S)	18	(S)	(S)	(S)	20	(S)
Montana	41	138	121	*227	86	115	37	27	23	51	23	35
Nebraska	48	318	254	362	351	304	31	27	24	27	26	33
Nevada	59	702	591	658	791	769	23	7	8	9	6	5
New Hampshire	26	88	78	92	94	90	35	29	28	30	28	29
New Jersey	213	1 072	1 046	1 158	1 084	999	14	12	9	13	12	13
New Mexico	28	93	78	103	89	*103	39	39	39	33	34	60
New York	791	3 721	3 233	3 803	3 940	3 909	8	6	6	6	6	7
North Carolina	69	432	444	460	420	404	22	16	14	17	16	17
North Dakota	*19	171	143	202	172	165	43	21	20	24	22	18
Ohio	222	1 163	1 083	1 289	1 245	1 033	14	10	10	13	12	10
Oklahoma	22	101	89	101	*124	*89	26	37	35	23	45	42
Oregon	148	726	794	806	806	499	18	29	26	33	37	16
Pennsylvania	185	977	913	980	1 081	933	14	10	10	9	11	11
Rhode Island	49	100	83	108	109	98	27	31	36	29	30	30
South Carolina	72	294	263	298	310	306	25	19	19	20	19	19
South Dakota	37	211	201	243	204	197	32	32	33	28	36	34
Tennessee	80	641	599	635	627	702	23	23	25	25	23	20
Texas	255	1 745	1 855	1 897	1 851	1 378	13	7	6	8	8	8
Utah	43	150	154	133	177	135	31	29	32	26	32	25
Vermont	*11	*21	(S)	(S)	*32	*31	69	53	(S)	(S)	52	54
Virginia	167	960	952	993	972	922	16	11	12	11	10	11
Washington	220	937	884	1 145	829	888	14	10	11	10	10	14
West Virginia	*28	*75	*37	*62	*105	*96	42	46	61	51	48	50
Wisconsin	158	843	784	831	904	853	17	14	14	14	15	14
Wyoming	*13	*58	(S)	*49	*94	*40	52	69	(S)	73	65	65

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	7 834 956	6 417	7 089 650	769	745 306	13 315 544	-41.2	2	2	5
Alabama -----	68 806	(S)	(S)	*27	14 666	115 721	-40.5	11	(S)	22
Alaska -----	48 992	5	(D)	2	(D)	36 812	33.1	(Z)	(D)	(D)
Arizona -----	69 529	55	63 218	4	6 311	458 164	-84.8	11	12	(Z)
Arkansas -----	54 215	(S)	47 328	*19	*6 887	54 006	.4	12	12	48
California -----	1 024 549	962	1 010 113	*18	14 436	1 876 520	-45.4	4	4	17
Colorado -----	70 417	76	66 493	9	3 925	196 481	-64.2	18	19	27
Connecticut -----	52 639	69	49 096	19	3 542	287 884	-81.7	14	15	17
Delaware -----	(S)	(S)	(S)	*12	1 548	32 845	-63.8	(S)	(S)	8
District of Columbia -----	25 071	*13	2 209	24	22 862	60 818	-58.8	4	33	3
Florida -----	762 992	317	662 423	31	100 570	1 086 771	-29.8	4	5	(Z)
Georgia -----	217 627	115	189 549	33	28 077	302 460	-28.0	13	15	4
Hawaii -----	570 933	47	(D)	1	(D)	627 988	-9.1	3	(D)	(D)
Idaho -----	38 320	21	(D)	*11	(D)	14 839	158.2	15	(D)	(D)
Illinois -----	293 537	304	268 949	21	24 588	386 312	-24.0	6	6	19
Indiana -----	101 473	228	(D)	8	(D)	221 109	-54.1	15	(D)	(D)
Iowa -----	*52 794	67	*51 225	5	1 569	51 930	1.7	45	46	8
Kansas -----	30 635	52	(S)	*28	9 424	95 833	-68.0	26	(S)	29
Kentucky -----	90 147	68	59 294	*24	30 852	107 859	-16.4	13	17	21
Louisiana -----	40 424	(S)	32 970	*13	7 454	78 286	-48.4	10	12	2
Maine -----	8 968	46	8 749	*7	*218	101 636	-91.2	24	25	74
Maryland -----	151 890	184	144 173	22	7 717	372 866	-59.3	9	10	11
Massachusetts -----	119 073	168	110 328	29	8 745	741 912	-84.0	11	11	36
Michigan -----	201 051	197	193 694	*19	*7 357	226 003	-11.0	12	12	60
Minnesota -----	100 843	(S)	(D)	2	(D)	275 146	-63.3	5	(D)	(D)
Mississippi -----	29 734	29	22 802	9	6 931	74 987	-60.3	26	33	21
Missouri -----	(S)	170	(S)	*13	15 801	244 312	-35.2	(S)	(S)	8
Montana -----	26 466	41	19 207	*14	*7 259	20 278	30.5	22	16	69
Nebraska -----	32 523	47	30 259	*4	*2 264	31 368	3.7	28	30	54
Nevada -----	343 495	59	(D)	*7	(D)	243 158	41.3	2	(D)	(D)
New Hampshire -----	*9 905	25	*9 905	—	—	147 861	-93.3	45	45	—
New Jersey -----	174 751	212	165 033	*28	9 718	467 373	-62.6	12	13	23
New Mexico -----	12 704	28	11 012	4	*1 692	38 712	-67.2	31	35	52
New York -----	852 140	791	824 006	46	28 134	977 333	-12.8	5	6	26
North Carolina -----	93 161	(S)	52 241	*14	*40 920	386 395	-75.9	26	14	57
North Dakota -----	24 559	*19	21 569	4	2 990	33 795	-27.3	17	19	(Z)
Ohio -----	245 785	214	215 555	*26	30 230	425 803	-42.3	8	9	17
Oklahoma -----	16 775	22	(D)	*11	(D)	17 962	-6.6	10	(D)	(D)
Oregon -----	115 033	148	(D)	*12	(D)	114 466	.5	11	(D)	(D)
Pennsylvania -----	238 678	185	226 465	36	12 213	349 444	-31.7	10	11	19
Rhode Island -----	22 423	49	14 619	*12	(S)	56 348	-60.2	36	28	(S)
South Carolina -----	110 507	(S)	(S)	31	44 740	211 789	-47.8	22	(S)	28
South Dakota -----	*26 628	35	*26 381	*2	*246	17 288	54.0	47	47	63
Tennessee -----	85 264	79	72 894	7	*12 369	280 342	-69.6	13	13	40
Texas -----	434 949	254	415 043	13	19 906	338 981	28.3	9	9	3
Utah -----	31 559	42	13 596	7	*17 963	25 178	25.3	34	16	58
Vermont -----	*2 220	*11	(D)	*3	(D)	37 625	-94.1	43	(D)	(D)
Virginia -----	193 005	159	169 976	17	23 028	406 939	-52.6	23	26	2
Washington -----	159 018	219	149 823	*22	9 196	273 283	-41.8	11	12	4
West Virginia -----	9 705	*28	*5 526	*14	4 178	36 188	-73.2	38	62	33
Wisconsin -----	172 254	155	152 552	*22	*19 702	241 087	-28.6	17	19	44
Wyoming -----	*6 623	*13	(D)	1	(D)	7 020	-5.7	50	(D)	(D)

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	7 954 007	13 592 992	2	1
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS				
General building contractor	5 636 156	11 662 393	2	1
General building contractor, remodeling ¹	1 819 472	803 857	4	5
Operative builder	62 201	220 332	11	3
Other construction activities	134 190	197 582	5	(NA)
OTHER BUSINESS ACTIVITIES				
Building construction on land owned by you, for rent or lease	23 720	59 195	21	8
Construction management services	29 024	58 391	7	7
Real estate commissions and management fees	10 365	36 922	8	3
Other business activities	54 464	127 370	4	(NA)
Kind of business activity, n.s.k.	184 415	426 950	7	2

¹In 1987, this item, for the most part, represented the value of residential remodeling general contractor work. For 1992, it represents the value of both residential and nonresidential remodeling general contractor work.

Table 12. **Selected Industry Ratios for Establishments With Payroll: 1992 and 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	7.5	10.0	2
Number of construction workers	5.4	7.5	2
Number of all other employees	2.1	2.5	2
Payroll, all employees \$1,000 ..	178.8	215.1	2
Payroll, construction workers do ..	110.6	138.8	2
Payroll, other employees do ..	68.2	76.3	2
Dollar value of business done do ..	1 225.5	1 669.3	2
Value of construction work do ..	1 207.1	1 635.2	2
Cost of materials, components, supplies, and fuels do ..	308.7	353.2	2
Construction work subcontracted to others do ..	538.8	866.8	3
Rental cost for machinery, equipment, and buildings do ..	9.5	11.5	4
Capital expenditures, other than land do ..	8.0	11.4	6
Gross book value of depreciable assets do ..	75.1	81.4	5
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	23.8	21.4	1
Dollar value of business done do ..	163.0	166.4	2
Value added†† do ..	50.3	44.8	2
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	20.4	18.5	1
Value of construction work do ..	223.2	217.4	2
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	32.3	30.4	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.148	.132	1
Cost of materials, components, supplies, and fuels do ..	.256	.216	1
Cost of construction work subcontracted out to others do ..	.446	.530	1
Value of construction work subcontracted in from others do ..	.043	.053	10
Rental cost for machinery, equipment, and buildings do ..	.008	.007	3

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	7.5	23.8	223.2	.148	.256	.446	.043	.008
Alabama -----	11.7	18.3	172.2	.136	.285	.465	.044	.011
Alaska -----	40.3	35.3	193.3	.232	.120	.286	—	.009
Arizona -----	9.8	16.4	172.7	.134	.230	.429	* .025	.007
Arkansas -----	9.7	19.1	302.4	.109	.356	.491	.001	.004
California -----	6.5	23.0	231.8	.135	.276	.427	.067	.007
Colorado -----	8.6	24.0	195.0	.182	.237	.498	* .033	.007
Connecticut -----	4.0	23.1	227.3	.130	.278	.439	.038	.010
Delaware -----	10.3	(D)	99.2	(D)	(D)	(D)	.003	(S)
District of Columbia -----	3.8	10.1	57.2	.227	.155	.106	.011	.001
Florida -----	12.5	21.2	258.4	.126	.233	.538	.041	.007
Georgia -----	12.1	21.6	293.9	.128	.254	.456	.027	.008
Hawaii -----	57.0	36.5	277.1	.173	(D)	(D)	.014	.014
Idaho -----	5.2	20.0	326.5	.098	.357	.457	(S)	.017
Illinois -----	5.2	27.1	254.2	.154	.222	.470	.009	.006
Indiana -----	4.6	18.3	171.7	.156	.238	.408	(S)	(S)
Iowa -----	4.8	17.2	224.2	.106	* .097	.649	(S)	* .004
Kansas -----	10.5	23.2	134.4	.201	.327	.356	(S)	.007
Kentucky -----	8.5	18.3	128.3	.172	.287	.331	.005	.007
Louisiana -----	6.3	20.5	120.4	.235	.281	.262	(S)	.018
Maine -----	2.5	12.6	92.1	.167	.346	.244	* .061	.008
Maryland -----	6.0	24.4	249.3	.145	.123	.566	.020	.007
Massachusetts -----	4.6	27.3	202.4	.191	.284	.362	* .047	.016
Michigan -----	6.8	20.3	211.9	.139	.289	.386	* .146	.007
Minnesota -----	6.7	26.0	394.7	.100	.174	.621	.008	.002
Mississippi -----	11.3	13.0	83.7	.185	.263	.309	* .011	.006
Missouri -----	5.3	20.1	(S)	(S)	(S)	(S)	(S)	(S)
Montana -----	4.1	14.7	139.2	.128	.284	.338	.024	(S)
Nebraska -----	8.2	17.2	105.8	.202	.209	.305	(S)	* .007
Nevada -----	15.0	35.9	409.5	.110	.188	.635	.026	.006
New Hampshire -----	4.4	28.8	128.8	.292	.122	.292	* .036	.018
New Jersey -----	6.7	31.2	232.9	.179	.287	.297	.086	.011
New Mexico -----	4.8	12.9	118.4	.157	.431	.302	(S)	* .010
New York -----	6.7	25.6	223.2	.162	.258	.420	.029	.009
North Carolina -----	8.5	18.2	145.6	.169	.304	.388	.036	.007
North Dakota -----	11.9	18.7	128.0	.189	.310	.324	.018	* .008
Ohio -----	7.4	26.3	206.1	.180	.253	.475	.031	.009
Oklahoma -----	5.4	14.2	96.7	.175	.255	.280	* .014	.003
Oregon -----	6.4	25.4	161.4	.205	.249	.454	(S)	.004
Pennsylvania -----	7.4	(D)	233.4	(D)	.256	.399	(S)	(S)
Rhode Island -----	2.8	19.7	186.5	.142	.222	.412	.140	.019
South Carolina -----	5.9	22.4	(S)	(S)	(S)	(S)	(S)	(S)
South Dakota -----	7.7	19.7	211.8	.125	.300	.439	(S)	* .009
Tennessee -----	10.7	18.3	190.2	.127	.292	.451	* .027	.007
Texas -----	9.3	20.8	247.3	.113	.240	.453	* .068	.006
Utah -----	4.9	15.9	114.7	.195	.361	.337	.046	.007
Vermont -----	*2.0	21.0	71.4	.309	(D)	.077	—	.064
Virginia -----	8.1	20.6	212.8	.135	.263	.424	* .042	.007
Washington -----	5.6	22.5	214.1	.139	.343	.369	.043	.008
West Virginia -----	3.0	13.0	*73.7	.198	.387	.156	.104	.002
Wisconsin -----	7.1	22.4	184.1	.162	.358	.383	.030	.006
Wyoming -----	*5.0	22.8	*106.0	*.248	*.125	*.455	—	.005

Appendix A.

Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

Census of Construction Industries

CC92-I-3

INDUSTRY SERIES

Operative Builders

Industry 1531



1992

Census of Construction Industries

CC92-I-3

INDUSTRY SERIES

Operative Builders

Industry 1531

Issued July 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Juliana Van Berkum**, **Susan L. Hostetter**, **Doris M. Kling**, **Carolyn J. Stone**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke**. Under the direction of **C. Lloyd Anderson**, the Systems Support Staff maintained the small computers and assisted in the management of computer output.

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Operative Builders

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Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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Summary of Findings

Establishments classified in this industry are primarily engaged in the construction of single-family houses and other buildings for sale on their own account rather than as contractors. This industry includes speculative builders and condominium developers. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$46.1 billion in total dollar value of business. Of this amount, \$44.6 billion were for the value of construction work. These establishments paid out \$12.8 billion for materials, components, and supplies and \$17.7 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$339 million. Value added for 1992 was \$15.3 billion.

There were 16,989 establishments with total employment averaging 114,194 during the year. Total payroll for 1992 was \$3.4 billion.

Larger establishments with 20 employees or more, while representing only 6 percent of the total number of

employer establishments in this industry, accounted for 52 percent of all business done.

A “construction establishment” is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

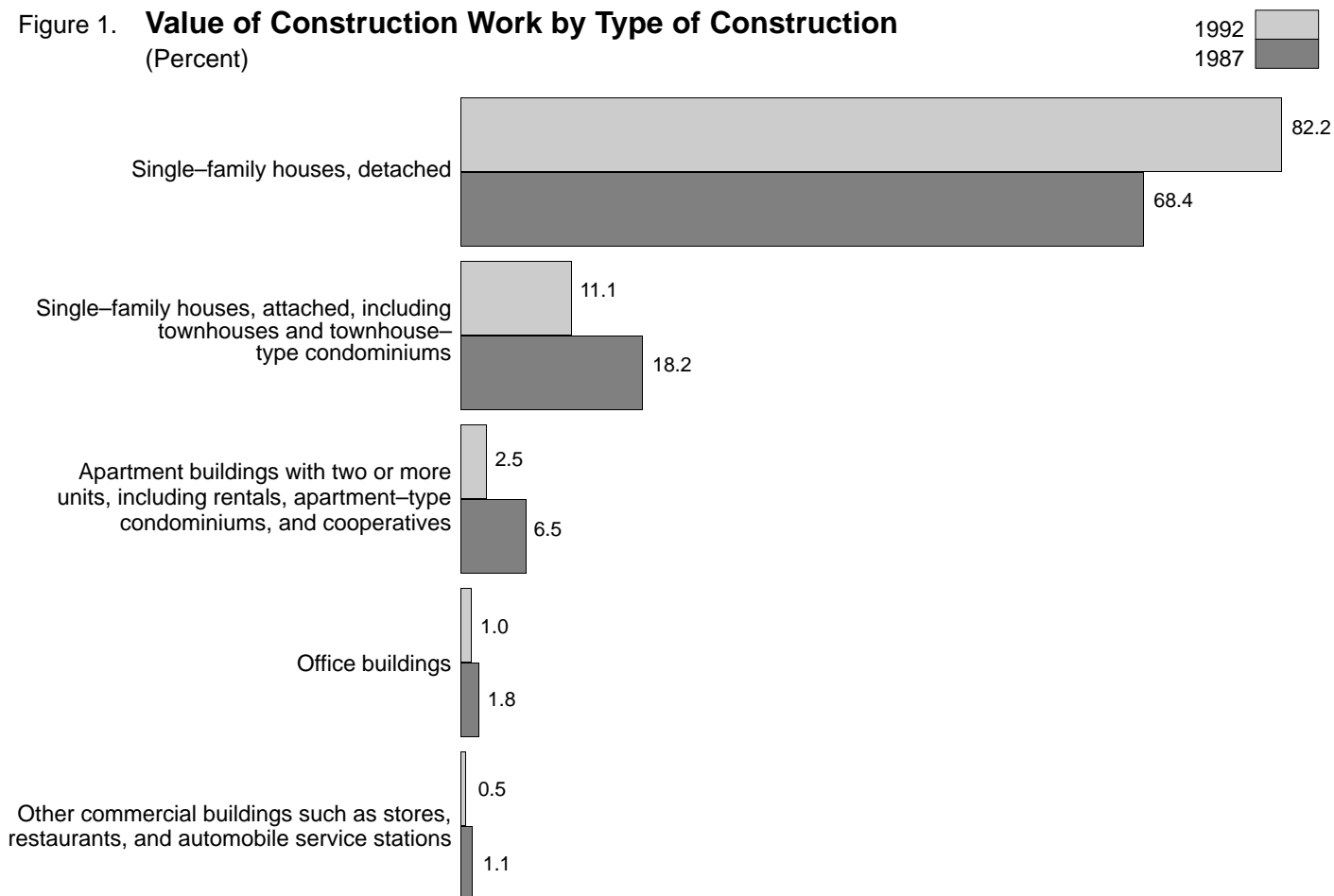


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

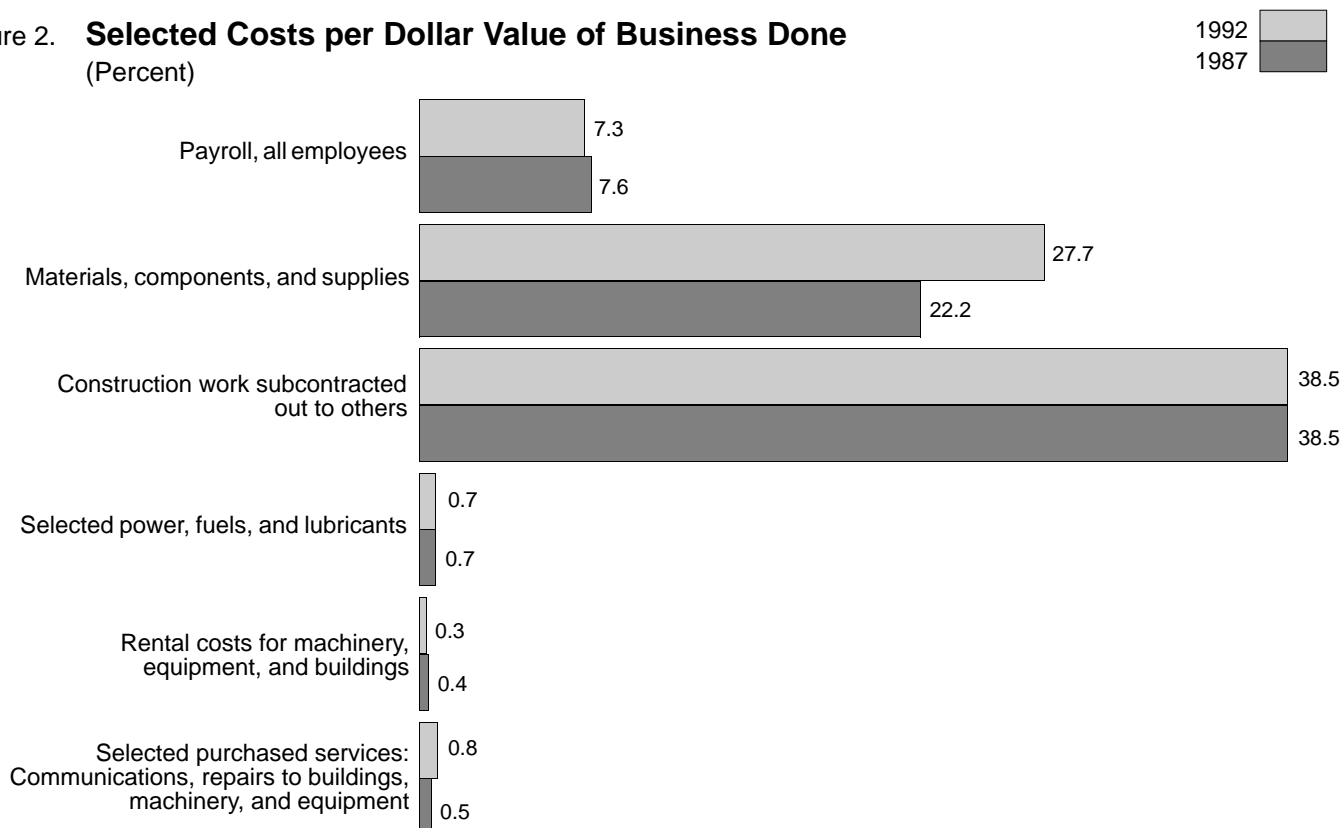


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	16 989	114 194	49 693	3 358 753	1 044 923	44 588 033	26 843 321	15 288 760	13 094 239
Alabama -----	296	1 317	637	29 580	10 125	431 333	287 102	74 225	(S)
Alaska -----	25	118	*71	2 015	776	31 556	15 403	(S)	8 472
Arizona -----	244	2 769	712	87 470	15 623	1 426 598	618 733	445 166	193 944
Arkansas -----	127	340	179	5 638	2 360	69 706	48 383	10 113	39 231
California -----	1 634	16 813	6 690	548 305	151 837	6 664 893	3 537 402	2 410 760	1 376 801
Colorado -----	251	1 685	490	53 257	10 982	1 139 481	621 545	376 942	276 918
Connecticut -----	230	997	519	28 882	12 392	285 748	196 161	131 226	73 842
Delaware -----	62	532	255	11 850	4 459	159 524	102 900	60 398	46 811
District of Columbia -----	12	234	111	7 919	3 254	39 666	24 822	14 120	12 554
Florida -----	1 263	11 974	4 600	301 024	75 323	4 109 533	2 514 360	1 414 786	1 221 719
Georgia -----	739	3 573	1 556	99 276	28 159	1 486 249	974 894	386 648	615 597
Hawaii -----	54	707	485	25 723	16 304	208 746	134 931	59 158	79 390
Idaho -----	123	291	172	7 608	3 277	(S)	(S)	(S)	32 585
Illinois -----	707	5 751	2 288	198 116	52 514	2 358 890	1 282 865	828 698	499 488
Indiana -----	338	2 075	1 059	49 561	20 193	861 564	564 498	273 622	305 679
Iowa -----	107	396	220	10 541	4 161	168 164	84 371	38 929	48 965
Kansas -----	138	654	350	14 145	5 339	321 368	208 392	82 966	130 847
Kentucky -----	196	1 718	646	51 489	13 651	604 805	350 382	153 524	212 984
Louisiana -----	127	524	174	9 577	2 369	156 026	114 325	62 893	52 614
Maine -----	61	259	148	6 087	2 916	81 904	57 089	34 024	23 367
Maryland -----	460	4 745	1 993	151 086	45 821	1 788 957	1 031 884	627 356	616 433
Massachusetts -----	372	1 457	732	40 896	18 329	647 281	414 646	209 810	215 869
Michigan -----	515	2 290	972	78 257	22 733	805 423	496 069	279 384	250 329
Minnesota -----	332	1 731	812	56 261	17 142	880 172	515 277	276 421	271 497
Mississippi -----	99	453	166	10 900	2 538	170 237	128 712	(S)	63 274
Missouri -----	388	2 481	1 602	67 287	36 560	775 756	543 871	296 806	265 101
Montana -----	61	247	160	8 130	3 444	68 143	42 793	23 185	20 138
Nebraska -----	112	546	279	14 777	5 361	234 080	150 505	68 173	84 580
Nevada -----	184	1 892	853	53 138	18 804	697 365	362 279	194 720	184 540
New Hampshire -----	85	350	146	9 452	2 881	108 196	78 713	38 399	42 062
New Jersey -----	559	4 058	1 588	122 571	36 441	1 472 728	958 805	648 651	383 802
New Mexico -----	125	666	386	16 612	6 609	230 697	140 508	97 650	47 374
New York -----	828	4 228	1 995	122 446	44 212	1 318 436	843 844	485 367	422 534
North Carolina -----	793	4 330	1 853	116 160	36 645	1 483 880	1 020 346	471 349	598 653
North Dakota -----	19	68	45	1 893	1 091	18 137	11 815	6 327	5 872
Ohio -----	666	3 996	1 867	121 682	42 246	1 675 382	999 513	537 372	536 230
Oklahoma -----	152	465	*232	11 758	*4 735	184 859	109 693	48 216	66 214
Oregon -----	312	890	459	21 922	9 457	330 511	209 530	110 618	113 827
Pennsylvania -----	646	4 489	2 414	111 353	48 160	1 279 369	855 123	502 140	410 335
Rhode Island -----	78	182	118	4 082	2 649	39 879	27 335	12 769	15 579
South Carolina -----	293	1 051	395	29 003	6 993	483 247	327 754	148 379	186 378
South Dakota -----	35	169	*72	3 259	*1 246	*36 459	24 426	*12 294	16 246
Tennessee -----	408	1 648	799	40 242	13 461	520 651	333 192	148 184	199 009
Texas -----	553	6 697	1 857	249 571	49 583	4 192 519	2 651 677	1 404 940	1 326 352
Utah -----	104	616	393	13 613	6 793	185 144	106 147	56 120	58 378
Vermont -----	60	164	71	3 408	1 259	39 561	30 754	11 969	20 493
Virginia -----	800	5 671	2 691	160 738	51 793	2 177 750	1 411 931	858 173	638 015
Washington -----	866	4 527	2 586	136 095	56 837	1 673 294	991 715	632 544	425 485
West Virginia -----	116	408	273	9 412	4 115	66 201	49 332	30 156	26 295
Wisconsin -----	221	930	501	24 231	10 752	304 081	168 724	81 525	110 022
Wyoming -----	18	(S)	(S)	(S)	(S)	*5 889	(S)	(S)	*1 952

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
17 744 712	380 183	154 484	236 229	2 493 600	168 940	48 959 809	15 173 454	1	1	5	U.S.
144 232	*6 744	(S)	2 570	26 369	(D)	359 331	(D)	10	12	33	AL
16 152	(S)	*149	*226	(D)	*29	7 552	1 712	36	36	46	AK
807 866	807	4 817	7 427	59 138	6 115	1 900 939	565 485	4	6	9	AZ
21 323	(S)	(S)	*1 272	4 115	(D)	99 616	27 320	22	21	63	AR
3 127 491	105 065	32 019	16 300	336 487	23 367	9 709 500	3 345 739	1	2	8	CA
517 936	864	2 574	4 269	24 286	3 394	866 181	322 709	7	6	19	CO
89 587	1 181	1 245	1 807	20 495	4 165	897 440	273 286	8	11	33	CT
56 624	*965	1 263	479	3 087	748	143 834	26 149	14	11	27	DE
14 844	45	268	*252	(D)	998	191 696	56 315	7	10	43	DC
1 595 173	42 537	12 194	20 972	272 035	18 875	5 120 878	1 363 618	2	4	23	FL
511 356	*7 093	2 483	10 157	68 983	5 754	(D)	408 852	6	6	34	GA
73 815	321	1 313	1 414	10 557	(D)	(D)	8 556	3	3	(Z)	HI
23 778	(S)	129	429	*8 163	*132	23 941	*5 171	19	(S)	20	ID
1 076 026	10 691	5 344	10 139	119 026	4 552	1 702 600	449 830	5	4	13	IL
297 066	4 872	1 725	*9 336	29 873	2 320	585 018	157 470	8	8	72	IN
83 792	472	229	660	4 958	519	(D)	19 912	15	12	31	IA
112 976	3 269	607	*1 796	*13 511	(D)	(D)	48 985	17	20	59	KS
254 423	(S)	906	4 729	43 898	1 578	353 058	80 367	9	8	12	KY
41 701	*1 144	358	546	2 958	615	115 850	22 535	17	19	12	LA
24 815	(S)	*952	*402	2 605	765	145 632	(D)	26	28	63	ME
757 073	6 288	10 816	4 915	98 255	9 480	2 927 423	1 193 180	3	4	15	MD
232 635	2 257	(S)	2 234	39 209	5 535	1 275 204	369 665	8	15	25	MA
309 354	15 713	6 187	3 677	38 150	2 244	732 842	194 030	7	8	13	MI
364 895	4 892	*3 903	4 833	36 108	2 025	711 990	216 724	8	11	38	MN
41 526	(S)	(S)	*1 747	*9 969	789	174 143	57 413	17	24	52	MS
231 885	26 863	1 146	2 845	20 858	3 558	790 402	212 954	8	5	18	MO
25 351	136	*105	*33	*1 095	111	27 657	5 340	20	10	51	MT
83 575	5 336	592	2 983	16 598	(D)	(D)	(D)	11	8	12	NE
335 086	2 450	2 728	3 590	30 448	1 302	351 401	111 965	4	4	19	NV
29 484	(S)	525	(S)	7 670	2 843	540 503	184 272	10	11	(S)	NH
513 923	4 659	4 912	8 833	122 022	8 311	2 570 031	1 022 611	4	6	10	NJ
90 189	148	*615	832	*6 925	925	152 276	42 561	12	9	24	NM
474 592	4 874	3 920	5 962	109 500	7 506	2 140 888	684 003	5	5	17	NY
463 534	*12 053	4 456	9 632	141 538	5 786	1 342 046	(D)	5	6	16	NC
6 322	(S)	*119	380	1 189	(D)	42 617	14 490	20	12	9	ND
675 869	6 049	7 623	9 138	117 125	4 531	1 368 380	375 844	5	6	16	OH
75 166	298	331	*1 298	6 504	*645	108 305	*23 825	32	17	53	OK
120 981	351	427	1 434	17 570	397	126 024	38 836	11	17	30	OR
424 246	13 262	4 437	7 980	104 364	5 841	(D)	368 615	5	6	7	PA
12 545	*173	81	103	3 612	860	153 474	34 451	17	16	34	RI
155 492	931	966	3 505	(S)	1 924	328 818	53 427	11	10	35	SC
*12 033	(S)	53	*421	11 889	210	21 888	3 168	35	38	67	SD
187 459	(S)	1 381	2 789	28 217	3 017	606 496	139 481	9	10	26	TN
1 540 843	12 057	10 635	32 008	170 849	8 519	3 020 431	936 402	4	2	2	TX
78 997	*2 220	1 097	(S)	8 017	(D)	(D)	23 197	14	13	(S)	UT
8 806	(S)	(S)	*397	3 971	336	(D)	(D)	16	27	60	VT
765 819	17 672	8 227	14 456	153 664	10 224	2 776 228	851 474	5	5	32	VA
681 579	24 027	4 188	7 848	63 366	2 476	600 398	159 547	5	7	13	WA
(S)	257	149	(S)	3 719	305	38 457	18 738	19	21	(S)	WV
135 357	(S)	*1 205	*4 158	33 013	684	(D)	55 887	12	13	55	WI
*2 253	(S)	(S)	*97	294	(S)	(S)	(S)	(S)	(S)	62	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	16 989	20 766	14 053	23 477	1	1	1	2
Proprietors and working partners	3 596	3 447	2 481	10 397	4	5	4	3
All employees**	114 194	168 940	107 635	173 819	1	1	1	2
Construction workers:								
March	47 452	76 105	50 316	95 642	1	1	1	1
May	51 197	81 622	52 952	112 707	1	1	1	1
August	52 578	84 477	53 911	119 205	1	1	1	1
November	47 547	75 806	51 237	110 876	1	1	1	1
Average	49 693	79 502	53 212	109 702	1	1	1	1
Other employees:								
March	63 389	87 754	51 721	59 416	1	1	1	4
May	64 920	89 131	(NA)	(NA)	1	1	(NA)	(NA)
August	65 951	91 531	(NA)	(NA)	1	1	(NA)	(NA)
November	63 744	89 334	(NA)	(NA)	1	1	(NA)	(NA)
Average	64 501	89 437	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	3 358 753	4 385 006	1 873 775	2 026 118	1	1	1	2
Payroll, construction workers	1 044 923	1 478 312	709 719	1 053 389	1	1	1	1
Payroll, other employees	2 313 830	2 906 693	1 164 056	972 729	1	1	1	2
First-quarter payroll, all employees	745 945	1 065 553	437 994	413 934	1	1	1	2
Fringe benefits, all employees	571 009	760 135	332 603	321 075	1	1	1	2
Legally required expenditures	377 881	540 504	238 386	206 937	2	1	1	2
Voluntary expenditures	193 128	219 630	94 217	114 138	1	1	1	2
Dollar value of business done	46 127 711	57 474 037	18 084 627	22 917 960	1	1	1	1
Value of construction work	44 588 033	48 959 809	15 607 430	19 812 272	1	1	1	1
Value of construction work subcontracted in from others	380 183	559 465	90 971	130 570	5	9	6	6
Other business receipts	1 539 678	1 487 943	427 508	473 446	2	2	1	3
Net value of construction work†	26 843 321	26 837 792	8 841 057	10 627 381	1	1	1	2
Value added††	15 288 760	15 173 454	5 492 462	5 229 031	1	1	1	3
Selected costs	30 838 951	35 274 278	10 542 476	15 056 687	1	1	1	1
Materials, components, and supplies	12 755 391	12 773 237	3 613 878	5 639 757	1	1	1	1
Construction work subcontracted out to others	17 744 712	22 122 017	6 766 373	9 184 892	1	1	1	2
Selected power, fuels, and lubricants	338 847	379 023	162 224	232 038	1	1	1	2
Electricity	114 859	143 007	70 476	65 487	2	1	1	3
Natural and manufactured gas	81 149	30 464	15 177	23 100	2	2	4	3
Gasoline and diesel fuel	135 602	187 447	67 162	98 623	2	1	1	2
On highway use	119 052	168 907	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use	16 550	18 539	(NA)	(NA)	5	4	(NA)	(NA)
Other, including lubricating oils and greases	7 238	18 104	9 407	44 834	6	2	3	3
Rental cost for machinery, equipment, and buildings	154 484	221 562	95 850	64 054	3	2	1	3
For machinery and equipment	50 915	82 015	34 702	37 615	4	3	2	3
For buildings	103 568	139 546	61 148	26 439	3	2	1	4
Selected purchased services	361 606	296 689	126 221	161 959	3	1	1	2
Communication services	119 225	141 960	58 195	68 985	4	1	1	2
Repairs to buildings and other structures	39 017	50 602	27 337	23 079	10	3	2	5
Repairs to machinery and equipment	203 363	104 127	40 689	69 896	3	2	2	3
Ownership of construction projects:								
Value of construction work	44 588 033	48 959 809	15 607 430	19 812 272	1	1	1	1
Government owned	292 974	434 551	205 309	114 825	13	10	31	8
Federal	145 267	64 874	(NA)	(NA)	10	12	(NA)	(NA)
State and local	147 707	369 677	(NA)	(NA)	22	12	(NA)	(NA)
Privately owned	44 295 059	48 525 258	15 402 121	19 697 448	1	1	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets	2 460 213	4 492 230	3	2
Capital expenditures, other than land	236 229	529 751	5	3
New	213 648	462 786	5	3
Used	22 581	66 964	8	7
Retirements and disposition of depreciable assets	202 841	338 447	4	5
End-of-year gross book value of depreciable assets	2 493 600	4 683 534	3	2
Depreciation charges during year	249 312	504 542	4	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets	1 320 379	2 379 987	5	3
Capital expenditures, other than land	81 910	285 986	9	4
New buildings and other structures	73 554	248 006	9	4
Used buildings and other structures	8 356	37 979	17	10
Retirements and disposition of depreciable assets	106 686	225 923	6	8
End-of-year gross book value of depreciable assets	1 295 603	2 440 049	5	3
Depreciation charges during year	92 513	210 186	7	3
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets	1 139 833	2 112 243	3	3
Capital expenditures, other than land	154 318	243 765	5	3
New machinery and equipment, including automobiles and trucks	140 094	214 780	5	3
New automobiles and trucks, intended primarily for highway use	50 057	89 784	6	4
Used machinery and equipment, including automobiles and trucks	14 224	28 985	8	10
Retirements and disposition of depreciable assets	96 155	112 523	5	2
End-of-year gross book value of depreciable assets	1 197 997	2 243 485	3	2
Depreciation charges during year	156 799	294 355	3	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	16 989	1
Value of construction work	44 588 033	1
Establishments with inventories:		
Number	4 389	2
Value of construction work	11 889 396	1
Inventories ¹ :		
End of 1992, materials and supplies	1 671 594	4
End of 1991, materials and supplies	1 325 255	5
Establishments with no inventories:		
Number	6 261	2
Value of construction work	20 402 242	1
Establishments not reporting:		
Number	6 338	2
Value of construction work	12 296 395	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	16 989	12 016	2 741	1 214	680	220	89	21	7	—
All employees** -----	114 194	21 582	17 329	16 060	20 095	14 677	13 488	6 858	4 105	—
Payroll, all employees -----	3 358 753	513 289	469 537	481 729	685 306	491 615	414 856	226 473	75 948	—
Dollar value of business done -----	46 127 711	9 675 485	6 375 251	5 933 826	9 142 101	6 741 825	4 810 922	2 624 473	823 828	—
Value of construction work -----	44 588 033	9 465 233	6 180 438	5 751 965	8 879 461	6 428 710	4 516 155	2 542 451	823 620	—
Net value of construction work† -----	26 843 321	6 086 095	3 947 554	3 564 412	5 275 108	3 686 188	2 592 150	1 258 617	433 197	—
Value added†† -----	15 288 760	3 114 526	2 107 209	1 978 380	3 032 121	2 356 427	1 738 647	648 453	312 997	—
Cost of materials, components, supplies, and fuels -----	13 094 239	3 181 821	2 035 159	1 767 892	2 505 627	1 642 876	1 148 270	692 186	120 408	—
Cost of construction work subcontracted out to others -----	17 744 712	3 379 138	2 232 884	2 187 553	3 604 353	2 742 522	1 924 005	1 283 834	390 423	—
Rental cost for machinery, equipment, and buildings -----	154 484	22 309	20 024	24 999	30 383	24 532	21 279	7 632	3 326	—
Capital expenditures, other than land -----	236 229	55 199	43 838	28 097	30 025	20 996	43 135	14 939	(D)	—
End-of-year gross book value of depreciable assets -----	2 493 600	572 551	411 069	372 148	289 117	219 249	492 293	137 174	(D)	—
1987										
All employees** -----	168 940	27 347	25 116	25 828	30 477	17 002	22 229	11 983	8 955	(D)
Value of construction work -----	48 959 809	9 728 924	6 656 603	6 494 608	8 407 060	5 840 612	7 192 271	2 054 410	2 585 320	(D)
Value added†† -----	15 173 454	2 473 369	1 967 605	1 793 580	2 495 356	1 972 849	2 559 883	665 177	1 245 634	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	2	3	3	2	1	1	(Z)	(Z)	—
Net value of construction work† -----	1	3	4	4	1	1	(Z)	(Z)	(Z)	—
Capital expenditures, other than land -----	5	11	19	13	1	(Z)	(Z)	(Z)	(D)	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	16 989	(S)	(S)	(S)	2 474	2 706	2 890	3 979	1 559	925	789
All employees** -----	114 194	(S)	(S)	(S)	4 374	5 826	9 336	19 192	12 679	14 226	46 872
Payroll, all employees -----	3 358 753	(S)	(S)	(S)	60 154	109 435	194 137	473 701	374 466	476 397	1 646 434
Dollar value of business done -----	46 127 711	(S)	(S)	(S)	428 251	971 589	2 021 193	6 152 819	5 287 162	6 271 245	24 920 689
Value of construction work -----	44 588 033	(S)	(S)	(S)	413 520	946 509	1 962 928	5 937 493	5 147 878	6 075 274	24 031 577
Net value of construction work† -----	26 843 321	(S)	(S)	(S)	280 853	646 323	1 301 603	3 819 520	3 288 883	3 834 542	13 620 153
Value added†† -----	15 288 760	(S)	(S)	(S)	145 074	312 943	703 158	1 877 485	1 812 240	2 074 066	8 339 331
Cost of materials, components, supplies, and fuels -----	13 094 239	(S)	(S)	(S)	150 510	358 460	656 711	2 157 360	1 615 927	1 956 448	6 169 933
Cost of construction work subcontracted out to others -----	17 744 712	(S)	(S)	(S)	132 668	300 187	661 324	2 117 973	1 858 995	2 240 731	10 411 425
Rental cost for machinery, equipment, and buildings -----	154 484	(S)	(S)	(S)	2 216	3 589	8 978	22 829	13 696	19 702	82 895
Capital expenditures, other than land -----	236 229	(S)	(S)	(S)	3 961	8 384	15 204	38 756	27 620	35 367	106 205
End-of-year gross book value of depreciable assets -----	2 493 600	(S)	(S)	(S)	58 788	111 801	176 789	389 982	287 778	343 768	1 113 977
1987											
All employees** -----	168 940	(S)	(S)	(S)	5 448	9 259	14 549	29 601	22 977	18 568	66 584
Value of construction work -----	48 959 809	(S)	(S)	(S)	374 990	995 536	2 512 856	7 169 486	6 691 793	5 652 483	25 508 785
Value added†† -----	15 173 454	(S)	(S)	(S)	109 390	262 635	637 722	1 850 064	2 004 588	1 621 767	8 670 449
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	(S)	6	5	5	3	3	3	1
Net value of construction work† -----	1	(S)	(S)	(S)	5	5	4	3	4	4	1
Capital expenditures, other than land -----	5	(S)	(S)	(S)	19	15	17	11	18	21	3

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

3-8 OPERATIVE BUILDERS

CONSTRUCTION—INDUSTRY SERIES

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	44 588 033	43 105 628	446 527	180 419	1	1	4	9
Building construction	43 726 187	43 099 764	446 280	180 143	1	1	4	9
Single-family houses	41 595 431	41 139 819	313 964	141 648	1	1	5	9
Single-family houses, detached	36 658 975	36 282 930	257 228	118 817	1	1	5	10
Single-family houses, attached, including townhouses and townhouse-type condominiums	4 936 456	4 856 889	56 736	22 831	3	3	13	26
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	1 119 523	1 107 490	7 202	4 830	6	6	22	26
Office buildings	426 515	382 209	31 316	*12 990	4	4	16	58
Other commercial buildings such as stores, restaurants, and automobile service stations	243 377	193 066	42 106	*8 204	7	7	12	53
Other nonresidential buildings	341 342	277 180	51 692	12 470	5	6	11	14
Nonbuilding construction	6 387	5 864	*247	(S)	37	39	60	(S)
Construction work, n.s.k.	855 459	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
1987								
Value of construction work	48 959 809	46 926 013	661 659	230 647	1	1	3	3
Building construction	47 658 449	46 774 224	657 241	226 985	1	1	3	7
Single-family houses	42 401 837	41 880 448	344 489	176 900	1	1	5	8
Single-family houses, detached	33 474 846	33 035 640	296 088	143 117	1	1	5	10
Single-family houses, attached, including townhouses and townhouse-type condominiums	8 926 990	8 844 807	48 400	33 783	2	2	12	14
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	3 174 608	3 047 373	106 374	20 860	4	4	5	14
Office buildings	870 128	806 043	59 487	4 597	4	4	5	17
Other commercial buildings such as stores, restaurants, and automobile service stations	545 587	479 971	49 700	15 915	3	4	7	13
Other nonresidential buildings	666 289	560 384	97 189	8 713	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	159 869	151 789	4 417	3 662	3	3	16	25
Construction work, n.s.k.	1 141 490	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work subcontracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
All establishments -----	16 989	114 194	3 358 753	44 588 033	40 634 090	26 843 321	15 288 760	17 744 712	1	1	1
Establishments not specializing by type -----	282	2 854	85 120	983 267	(NA)	532 937	322 988	450 330	6	3	3
Establishments specializing 51 percent or more -----	16 707	111 341	3 273 633	43 604 766	40 634 090	26 310 383	14 965 773	17 294 383	1	1	1
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	13 902	90 750	2 756 855	38 038 819	35 731 997	22 944 929	12 998 168	15 093 891	1	1	1
Establishments with —											
100 percent specialization -----	12 207	65 135	1 902 993	27 492 670	27 492 670	17 230 173	9 346 576	10 262 497	1	1	2
90 to 99 percent specialization -----	802	7 911	262 451	3 266 536	3 102 790	1 991 488	1 148 363	1 275 048	3	3	3
80 to 89 percent specialization -----	373	6 787	213 620	2 271 863	1 879 222	1 208 767	759 270	1 063 096	3	3	3
70 to 79 percent specialization -----	278	4 146	144 445	1 826 963	1 357 770	752 553	523 510	1 074 411	4	2	2
60 to 69 percent specialization -----	132	4 049	143 358	1 713 467	1 099 934	955 937	653 712	757 530	3	2	2
51 to 59 percent specialization -----	110	2 723	89 987	1 467 320	799 611	806 010	566 738	661 309	6	2	2
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	1 136	9 564	276 451	3 224 258	2 653 536	1 922 886	1 062 584	1 301 373	4	4	4
Establishments with —											
100 percent specialization -----	744	4 407	111 957	1 337 084	1 337 084	827 223	449 724	509 861	6	8	10
90 to 99 percent specialization -----	80	811	20 778	281 420	267 926	153 958	96 318	127 462	16	20	21
80 to 89 percent specialization -----	93	538	21 357	200 405	167 233	126 837	77 571	73 568	7	9	8
70 to 79 percent specialization -----	105	1 319	39 446	421 435	309 970	293 810	202 574	127 625	10	7	5
60 to 69 percent specialization -----	64	1 503	44 852	482 415	306 156	294 154	152 266	188 262	7	7	6
51 to 59 percent specialization -----	51	985	38 062	501 499	265 168	226 904	84 131	274 595	4	3	2
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type -----	384	4 046	83 728	808 671	782 607	465 401	278 633	343 271	4	8	10
Establishments with —											
100 percent specialization -----	287	3 535	69 792	644 940	644 940	356 546	213 747	288 394	4	9	12
90 to 99 percent specialization -----	30	241	6 653	78 211	75 770	*55 079	38 446	23 133	28	38	37
80 to 89 percent specialization -----	13	*97	2 402	27 896	22 753	20 994	*3 428	6 901	40	22	35
70 to 79 percent specialization -----	*11	77	1 956	24 095	17 958	(D)	10 004	(D)	24	18	(D)
60 to 69 percent specialization -----	(S)	70	2 398	30 632	19 603	20 003	11 843	10 629	17	29	14
51 to 59 percent specialization -----	(S)	(S)	(S)	*2 898	*1 582	(D)	(S)	(D)	(S)	58	(D)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	16 989	49 693	47 452	51 197	52 578	47 547	1	1	1	1	1	1
Alabama	296	637	662	723	588	576	12	12	13	12	13	13
Alaska	25	*71	*68	*66	*89	*63	34	54	47	47	51	50
Arizona	244	712	642	739	754	712	11	8	8	9	8	9
Arkansas	127	179	181	195	185	154	18	29	28	29	28	30
California	1 634	6 690	6 538	7 053	7 089	6 080	4	3	3	3	2	3
Colorado	251	490	412	494	525	531	11	13	13	13	12	13
Connecticut	230	519	519	519	519	521	11	10	10	9	9	10
Delaware	62	255	215	253	280	271	20	14	10	11	15	17
District of Columbia	12	111	121	119	98	108	23	5	4	4	5	4
Florida	1 263	4 600	4 525	4 685	4 714	4 476	5	3	5	3	3	3
Georgia	739	1 556	1 432	1 595	1 623	1 576	7	8	8	8	7	8
Hawaii	54	485	381	443	561	555	20	4	3	2	4	3
Idaho	123	172	184	162	176	168	19	25	25	26	21	29
Illinois	707	2 288	2 172	2 391	2 397	2 195	7	6	6	6	6	6
Indiana	338	1 059	926	1 084	1 161	1 063	10	11	12	11	10	11
Iowa	107	220	195	237	251	196	19	23	22	24	21	20
Kansas	138	350	349	368	368	317	17	22	22	20	20	23
Kentucky	196	646	611	663	667	641	14	9	9	8	8	10
Louisiana	127	174	163	167	198	169	18	30	27	30	30	34
Maine	61	148	94	175	187	137	25	33	37	31	34	34
Maryland	460	1 993	1 946	2 087	2 102	1 836	8	5	5	5	5	5
Massachusetts	372	732	661	746	801	719	9	10	10	10	10	11
Michigan	515	972	858	1 006	1 077	945	8	11	11	10	10	11
Minnesota	332	812	716	825	915	790	10	10	10	11	9	9
Mississippi	99	166	134	172	189	170	19	29	25	26	28	29
Missouri	388	1 602	1 496	1 680	1 728	1 505	10	9	9	9	9	9
Montana	61	160	145	174	174	148	25	25	26	25	25	27
Nebraska	112	279	292	334	251	241	18	18	14	24	18	15
Nevada	184	853	889	935	846	743	13	6	5	5	6	8
New Hampshire	85	146	(S)	148	185	140	14	9	(S)	8	14	8
New Jersey	559	1 588	1 503	1 591	1 703	1 555	8	6	6	5	6	7
New Mexico	125	386	337	392	422	392	16	16	15	16	16	17
New York	828	1 995	1 915	2 059	2 123	1 885	6	7	7	7	7	7
North Carolina	793	1 853	1 894	1 872	1 915	1 731	7	7	7	7	7	7
North Dakota	19	45	43	44	52	39	13	27	30	28	23	23
Ohio	666	1 867	1 707	1 886	2 006	1 868	7	7	7	7	6	6
Oklahoma	152	*232	*233	*252	*243	*203	15	58	55	54	59	60
Oregon	312	459	438	438	511	450	12	15	14	14	14	18
Pennsylvania	646	2 414	2 252	2 443	2 576	2 385	7	6	6	5	6	6
Rhode Island	78	118	120	122	115	113	16	19	18	17	16	18
South Carolina	293	395	384	408	429	359	12	19	18	18	19	21
South Dakota	35	*72	*60	*55	*97	*78	33	56	49	57	51	52
Tennessee	408	799	790	835	823	749	10	12	12	12	12	11
Texas	553	1 857	1 847	1 891	1 923	1 769	8	10	9	11	9	11
Utah	104	393	333	377	446	417	16	15	16	15	16	14
Vermont	60	71	61	79	84	59	25	22	21	21	24	22
Virginia	800	2 691	2 555	2 723	2 848	2 638	7	8	8	8	7	8
Washington	866	2 586	2 593	2 718	2 665	2 368	7	6	6	6	6	6
West Virginia	116	273	279	277	320	216	17	21	22	19	23	24
Wisconsin	221	501	466	476	553	511	14	13	13	12	13	14
Wyoming	18	(S)	(S)	(S)	(S)	(S)	30	(S)	(S)	(S)	(S)	(S)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	44 588 033	16 921	43 052 136	375	1 535 897	48 959 809	-8.9	1	1	3
Alabama -----	412 950	285	411 889	(S)	(S)	324 956	27.1	11	11	(S)
Alaska -----	32 292	25	31 556	(S)	(S)	*7 552	327.6	26	27	(S)
Arizona -----	1 407 527	236	1 231 054	10	176 473	1 663 057	-15.4	3	4	1
Arkansas -----	(D)	127	(D)	2	(D)	93 773	(D)	(D)	(D)	(D)
California -----	6 640 127	1 633	6 469 878	*15	170 249	9 625 335	-31.0	2	2	2
Colorado -----	1 136 818	251	1 136 818	—	—	891 856	27.5	5	5	—
Connecticut -----	289 130	229	(D)	1	(D)	889 335	-67.5	11	(D)	(D)
Delaware -----	176 905	62	159 524	12	17 381	169 735	4.2	12	13	(Z)
District of Columbia -----	18 023	7	(D)	1	(D)	227 032	-92.1	3	(D)	(D)
Florida -----	4 221 203	1 256	4 090 101	*18	131 102	5 228 884	-19.3	3	3	13
Georgia -----	1 551 594	739	1 486 249	*24	65 345	1 629 560	-4.8	6	6	4
Hawaii -----	(D)	(S)	(D)	1	(D)	31 569	(D)	(D)	(D)	—
Idaho -----	(S)	115	(S)	—	—	23 202	(S)	(S)	(S)	—
Illinois -----	2 350 935	704	2 330 407	*14	*20 528	1 661 320	41.5	4	4	59
Indiana -----	902 032	338	859 126	*13	*42 906	612 775	47.2	9	9	73
Iowa -----	161 085	107	155 283	(S)	(S)	84 921	89.7	13	13	(S)
Kansas -----	336 110	138	317 379	4	18 732	230 327	45.9	20	21	30
Kentucky -----	435 024	196	432 524	*18	2 500	310 058	40.3	11	11	34
Louisiana -----	155 211	126	155 211	—	—	124 568	24.6	18	18	—
Maine -----	81 904	61	81 904	—	—	142 179	-42.4	28	28	—
Maryland -----	1 828 123	460	1 647 908	27	180 216	2 279 502	-19.8	4	4	3
Massachusetts -----	648 056	372	635 151	8	12 906	1 289 077	-49.7	20	21	16
Michigan -----	799 297	515	796 237	(S)	(S)	733 868	8.9	8	8	(S)
Minnesota -----	882 450	332	(D)	2	(D)	743 410	18.7	10	(D)	(D)
Mississippi -----	156 684	98	153 709	(S)	*2 975	171 006	-8.4	22	23	74
Missouri -----	758 114	385	753 048	*17	5 066	797 195	-4.9	6	6	10
Montana -----	38 054	61	38 054	—	—	27 506	38.3	17	17	—
Nebraska -----	214 667	112	(D)	1	(D)	(D)	(D)	11	(D)	(D)
Nevada -----	748 387	184	693 017	8	55 370	511 990	46.2	5	5	(Z)
New Hampshire -----	101 818	84	97 600	*10	*4 218	588 912	-82.7	12	13	70
New Jersey -----	1 394 456	558	1 366 068	7	28 388	2 613 375	-46.6	6	6	3
New Mexico -----	229 083	123	228 377	(S)	(S)	166 783	37.4	15	15	(S)
New York -----	1 293 286	828	1 288 144	*10	*5 141	2 126 418	-39.2	6	6	43
North Carolina -----	1 557 123	793	1 465 624	12	91 499	1 638 574	-5.0	5	5	9
North Dakota -----	15 637	(S)	15 637	—	—	46 954	-66.7	18	18	—
Ohio -----	1 730 713	661	1 629 657	8	101 056	1 403 323	23.3	5	5	5
Oklahoma -----	172 412	151	(D)	1	(D)	117 303	47.0	19	(D)	(D)
Oregon -----	329 661	312	327 243	(S)	2 418	129 235	155.1	15	15	10
Pennsylvania -----	1 282 125	640	1 237 421	10	44 704	1 273 599	.7	5	5	(Z)
Rhode Island -----	48 338	78	39 835	(S)	(S)	153 246	-68.5	19	15	(S)
South Carolina -----	482 853	(S)	454 711	8	28 142	330 772	46.0	9	10	2
South Dakota -----	(D)	(S)	(D)	1	(D)	20 239	(D)	(D)	(D)	(D)
Tennessee -----	533 984	408	(D)	*7	(D)	652 477	-18.2	9	(D)	(D)
Texas -----	4 149 175	552	4 072 437	5	76 738	3 009 200	37.9	3	3	(Z)
Utah -----	164 103	104	164 103	—	—	148 892	10.2	14	14	—
Vermont -----	41 622	60	(D)	1	(D)	134 041	-68.9	23	(D)	(D)
Virginia -----	2 184 131	798	2 031 127	24	153 004	2 947 692	-25.9	4	5	(Z)
Washington -----	1 676 684	866	1 672 024	(S)	(S)	600 363	179.3	6	6	(S)
West Virginia -----	(D)	116	(D)	1	(D)	41 053	(D)	(D)	(D)	(D)
Wisconsin -----	(D)	221	(D)	(S)	(D)	(D)	(D)	(D)	(D)	(D)
Wyoming -----	(D)	(S)	(D)	1	(D)	*13 468	(D)	(D)	(D)	(D)

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	46 127 711	57 474 037	1	1
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS				
General building contractor	1 615 440	1 769 064	3	3
General building contractor, remodeling	247 168	(NA)	5	(NA)
Operative builder	42 031 683	45 122 900	1	1
Other construction activities	77 902	394 638	12	5
OTHER BUSINESS ACTIVITIES				
Building construction on land owned by you, for rent or lease	117 190	391 818	6	4
Construction management services	80 328	(NA)	11	(NA)
Real estate commissions and management fees	111 255	235 583	8	3
Rental or lease of properties	232 567	(NA)	4	(NA)
Subdividing and preparing your own land for sale, rent, or lease	585 582	867 269	3	3
Other business activities ¹	391 050	8 179 202	1	1
Kind of business activity, n.s.k.	637 546	513 563	2	7

¹In 1987, receipts from the sale of land were collected and shown separately. For 1992, respondents were instructed to exclude receipts from the sale of land from dollar value of business done.

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	6.7	8.1	1
Number of construction workers	2.9	3.8	1
Number of all other employees	3.8	4.3	1
Payroll, all employees	197.7	211.2	1
Payroll, construction workers	61.5	71.2	1
Payroll, other employees	136.2	140.0	1
Dollar value of business done	2 715.2	2 767.7	1
Value of construction work	2 624.5	2 357.7	1
Cost of materials, components, supplies, and fuels	770.7	633.4	1
Construction work subcontracted to others	1 044.5	1 065.3	1
Rental cost for machinery, equipment, and buildings	9.1	10.7	3
Capital expenditures, other than land	13.9	25.5	5
Gross book value of depreciable assets	146.8	225.5	3
AVERAGE PER EMPLOYEE			
Payroll, all employees	29.4	26.0	1
Dollar value of business done	403.9	340.2	1
Value added††	133.9	89.8	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers	21.0	18.6	1
Value of construction work	897.3	615.8	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees	35.9	32.5	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees .....	.075	.090	1
Cost of materials, components, supplies, and fuels .....	.294	.269	1
Cost of construction work subcontracted out to others .....	.398	.452	1
Value of construction work subcontracted in from others .....	.009	.011	5
Rental cost for machinery, equipment, and buildings .....	.003	.005	3

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	6.7	29.4	897.3	.075	.294	.398	.009	.003
Alabama -----	4.5	22.5	677.1	.069	(S)	.334	*.016	(S)
Alaska -----	4.8	17.1	*444.4	.064	.268	.512	(S)	.005
Arizona -----	11.3	31.6	2 003.7	.061	.136	.566	.001	.003
Arkansas -----	2.7	16.6	389.4	.081	.563	.306	(S)	*.014
California -----	10.3	32.6	996.2	.082	.207	.469	.016	.005
Colorado -----	6.7	31.6	2 325.5	.047	.243	.455	.001	.002
Connecticut -----	4.3	29.0	550.6	.101	.258	.314	.004	.004
Delaware -----	8.5	22.3	625.6	.074	.293	.355	*.006	.008
District of Columbia -----	20.3	33.8	357.4	.200	.316	.374	.001	.007
Florida -----	9.5	25.1	893.4	.073	.297	.388	.010	.003
Georgia -----	4.8	27.8	955.2	.067	.414	.344	*.005	.002
Hawaii -----	13.2	36.4	430.4	.123	.380	.354	.002	.006
Idaho -----	2.4	26.1	(S)	(S)	(S)	(S)	(S)	(S)
Illinois -----	8.1	34.4	1 031.0	.084	.212	.456	.005	.002
Indiana -----	6.1	23.9	813.6	.058	.355	.345	.006	.002
Iowa -----	3.7	26.6	764.4	.063	.291	.498	.003	.001
Kansas -----	4.8	21.6	918.2	.044	.407	.352	.010	.002
Kentucky -----	8.8	30.0	936.2	.085	.352	.421	(S)	.001
Louisiana -----	4.1	18.3	896.7	.061	.337	.267	*.007	.002
Maine -----	4.3	23.5	553.4	.074	.285	.303	(S)	*.012
Maryland -----	10.3	31.8	897.6	.084	.345	.423	.004	.006
Massachusetts -----	3.9	28.1	884.3	.063	.334	.359	.003	(S)
Michigan -----	4.5	34.2	828.6	.097	.311	.384	.020	.008
Minnesota -----	5.2	32.5	1 084.0	.064	.308	.415	.006	*.004
Mississippi -----	4.6	24.1	1 025.5	.064	.372	.244	(S)	(S)
Missouri -----	6.4	27.1	484.2	.087	.342	.299	.035	.001
Montana -----	4.1	32.9	425.9	.119	.296	.372	.002	.002
Nebraska -----	4.9	27.1	839.0	.063	.361	.357	.023	.003
Nevada -----	10.3	28.1	817.5	.076	.265	.481	.004	.004
New Hampshire -----	4.1	27.0	741.1	.087	.389	.273	(S)	.005
New Jersey -----	7.3	30.2	927.4	.083	.261	.349	.003	.003
New Mexico -----	5.3	24.9	597.7	.072	.205	.391	.001	.003
New York -----	5.1	29.0	660.9	.093	.320	.360	.004	.003
North Carolina -----	5.5	26.8	800.8	.078	.403	.312	*.008	.003
North Dakota -----	3.6	27.8	403.0	.104	.324	.349	(S)	*.007
Ohio -----	6.0	30.5	897.4	.073	.320	.403	.004	.005
Oklahoma -----	3.1	25.3	*796.8	.064	.358	.407	.002	.002
Oregon -----	2.9	24.6	720.1	.066	.344	.366	.001	.001
Pennsylvania -----	7.0	24.8	530.0	.087	.321	.332	.010	.003
Rhode Island -----	2.3	22.4	338.0	.102	.391	.315	*.004	.002
South Carolina -----	3.6	27.6	1 223.4	.060	.386	.322	.002	.002
South Dakota -----	4.9	19.3	506.4	.089	.446	.330	(S)	*.001
Tennessee -----	4.0	24.4	651.6	.077	.382	.360	(S)	.003
Texas -----	12.1	37.3	2 257.7	.060	.316	.368	.003	.003
Utah -----	5.9	22.1	471.1	.074	.315	.427	*.012	.006
Vermont -----	2.7	20.8	557.2	.086	.518	.223	(S)	*.017
Virginia -----	7.1	28.3	809.3	.074	.293	.352	.008	.004
Washington -----	5.2	30.1	647.1	.081	.254	.407	.014	.003
West Virginia -----	3.5	23.1	242.5	.142	.397	(S)	.004	.002
Wisconsin -----	4.2	26.1	606.9	.080	.362	.445	(S)	*.004
Wyoming -----	(S)	(S)	(S)	(S)	.331	.383	(S)	(S)

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C.

Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

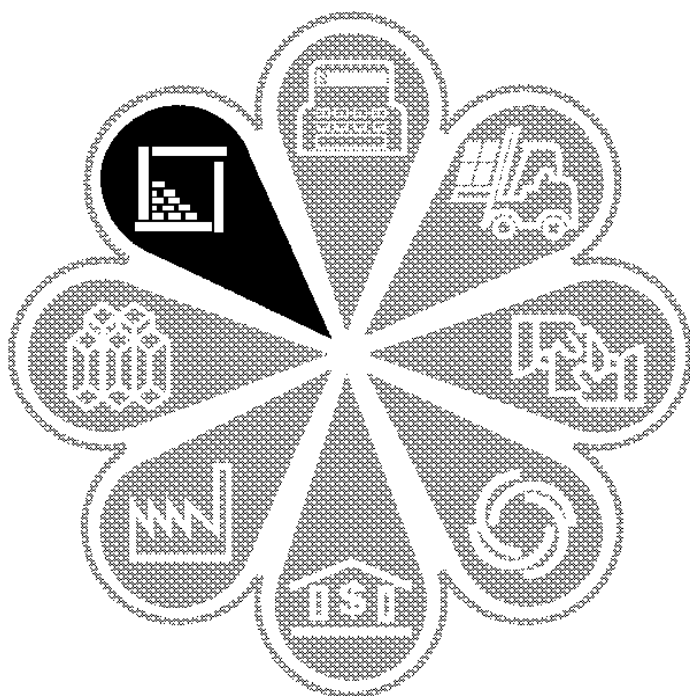
Census of Construction Industries

CC92-I-4

INDUSTRY SERIES

General Contractors— Industrial Buildings and Warehouses

Industry 1541



1992 Census of Construction Industries

CC92-I-4

INDUSTRY SERIES

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Industry 1541

Issued April 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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John P. Govoni, Acting Chief

Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year— buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment.	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number.	2					
Other employees—quarterly.	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners.	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total.	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added.	1, 2, 8	1	5	6		8
Rental costs:						
Total.	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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General Contractors— Industrial Buildings and Warehouses

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Summary of Findings

Establishments classified in this industry are primarily engaged in the construction of industrial buildings such as plants, factories, and warehouses whether industrial or commercial. This includes new work, reconstruction, and maintenance and repair. Establishments primarily engaged in the construction of industrial nonbuilding structures (blast furnaces, petroleum refineries, etc.) are classified in SIC 1629, Heavy Construction, Not Elsewhere Classified. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$21.0 billion in total dollar value of business. Of this amount, \$20.6 billion were for the value of construction work. These establishments paid out \$4.8 billion for materials, components, and supplies and \$9.6 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$159 million. Value added for 1992 was \$6.4 billion.

There were 7,963 establishments with total employment averaging 122,970 during the year. Total payroll for 1992 was \$3.5 billion.

Larger establishments with 20 employees or more, while representing only 17 percent of the total number of employer establishments in this industry accounted for 74 percent of all business done.

A “construction establishment” is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

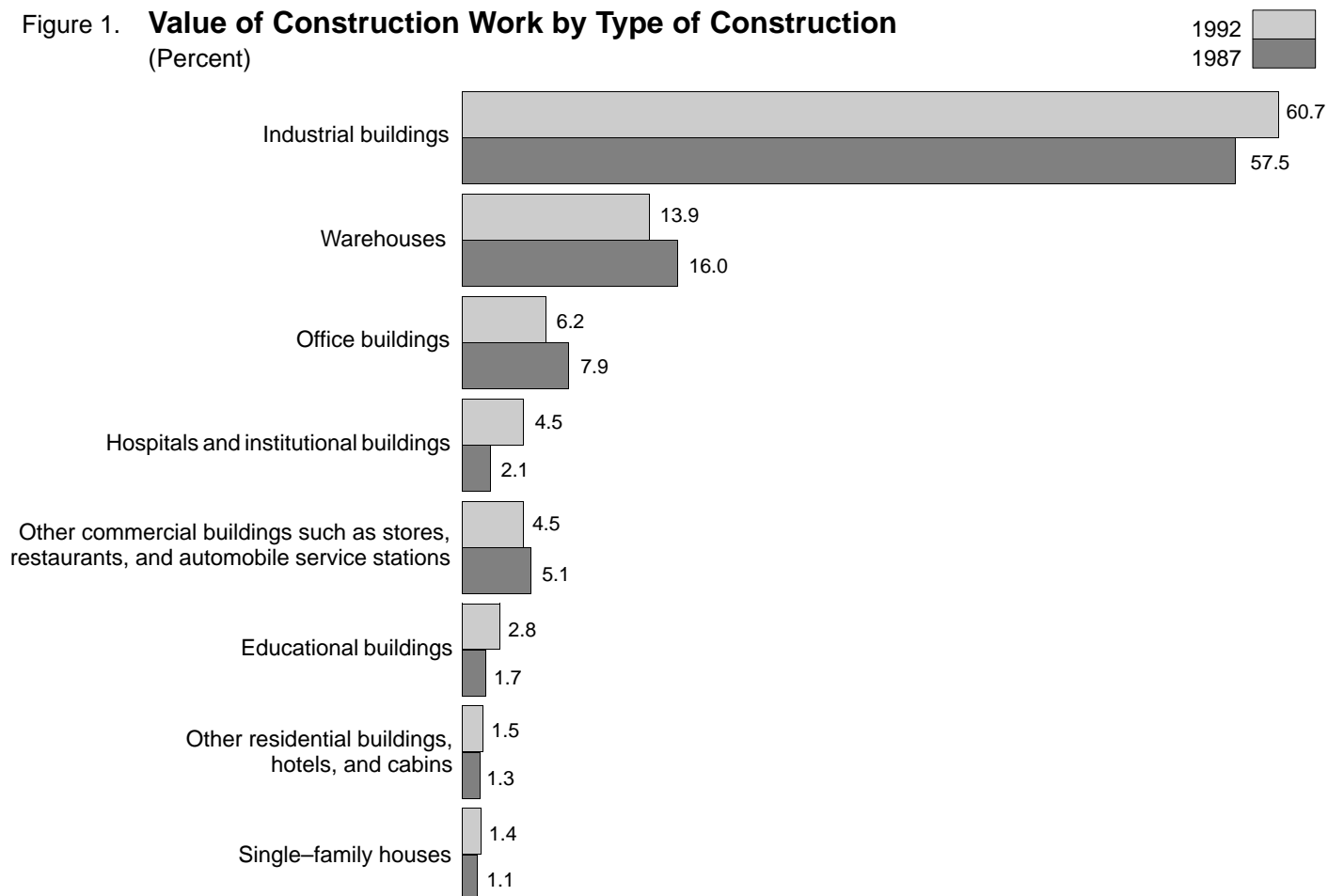


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

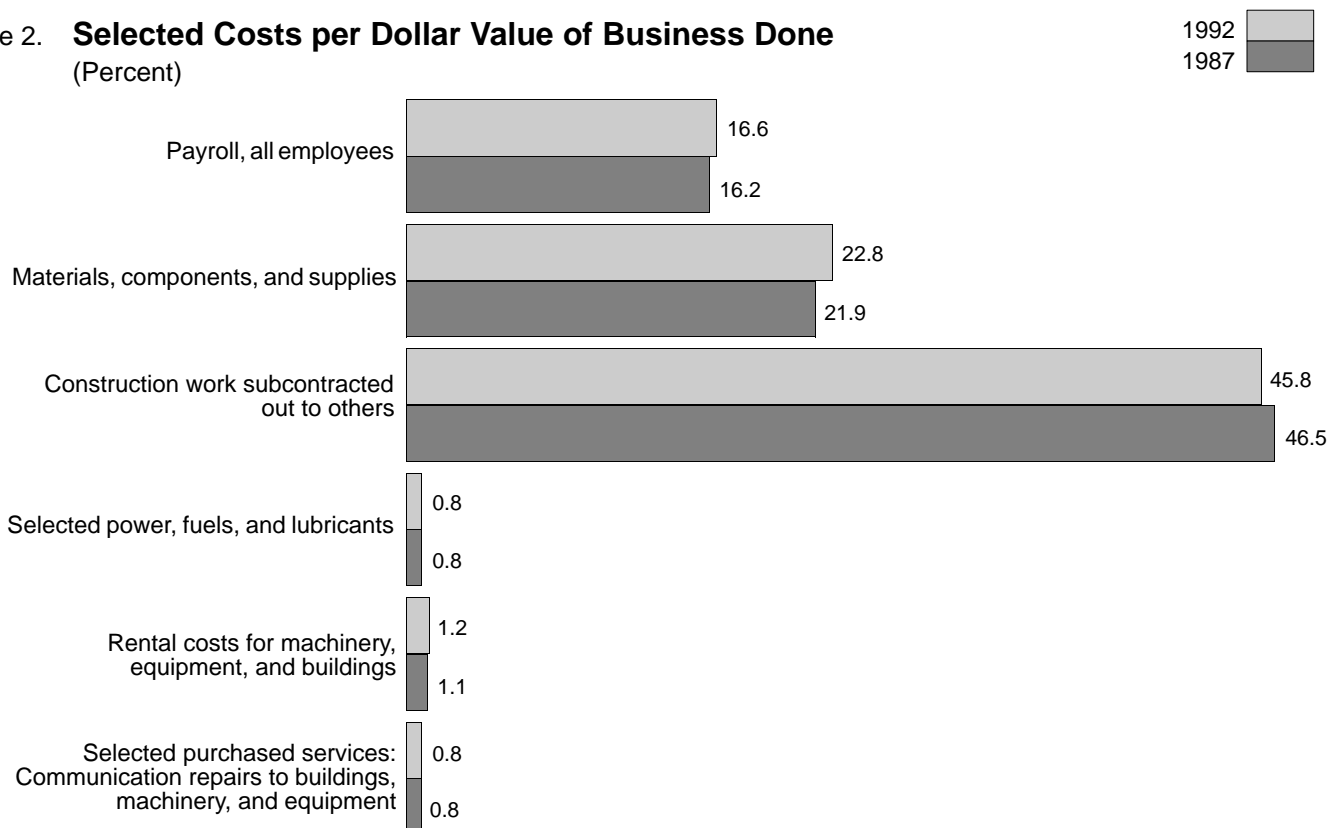


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	7 693	122 970	92 068	3 476 400	2 309 756	20 585 807	10 967 289	6 437 735	4 935 183
Alabama -----	163	6 739	5 643	174 570	134 499	494 291	386 242	256 468	131 290
Alaska -----	32	904	778	27 638	19 005	152 541	99 355	70 198	30 725
Arizona -----	80	1 301	903	34 221	22 037	232 124	94 011	44 988	52 614
Arkansas -----	59	823	660	18 110	12 147	158 411	74 611	26 686	49 588
California -----	885	8 595	5 916	278 757	164 319	1 843 354	816 550	473 034	382 425
Colorado -----	99	859	584	24 946	15 007	137 253	67 790	37 960	31 494
Connecticut -----	73	721	504	22 798	12 903	237 991	100 524	74 116	26 952
Delaware -----	30	712	607	23 345	18 165	95 697	48 404	35 048	(D)
District of Columbia -----	*4	(D)	(S)	(D)	(S)	(D)	(D)	(D)	(S)
Florida -----	310	5 102	3 512	140 274	87 477	980 950	594 520	263 371	342 894
Georgia -----	214	3 453	2 646	91 635	60 132	525 246	290 159	165 241	136 849
Hawaii -----	32	819	581	33 294	20 374	165 414	94 682	61 989	(S)
Idaho -----	45	596	424	15 681	10 161	102 312	53 591	30 119	26 607
Illinois -----	325	5 053	3 915	171 374	116 275	1 044 851	512 898	322 073	221 356
Indiana -----	206	3 643	2 816	104 449	74 142	505 678	297 308	165 888	135 182
Iowa -----	110	1 578	1 280	38 546	29 051	190 922	132 283	62 040	72 422
Kansas -----	88	1 081	824	26 963	18 874	148 720	98 758	47 124	55 306
Kentucky -----	131	2 907	2 292	67 949	48 578	361 374	170 550	97 404	(D)
Louisiana -----	147	2 335	1 840	47 833	33 090	196 291	138 698	82 267	57 555
Maine -----	50	400	306	9 484	6 295	50 302	31 433	18 412	(D)
Maryland -----	59	1 004	782	24 743	16 602	118 880	65 462	28 665	37 613
Massachusetts -----	145	1 150	720	37 426	22 211	225 901	112 124	80 674	32 248
Michigan -----	293	3 830	2 798	115 764	73 350	850 305	413 525	249 387	183 649
Minnesota -----	112	4 213	3 338	118 216	76 329	1 147 769	(D)	344 932	(D)
Mississippi -----	125	2 034	1 643	34 339	23 536	201 276	131 981	79 724	56 006
Missouri -----	197	4 085	3 010	131 471	93 695	884 869	494 716	309 229	(D)
Montana -----	31	242	163	6 602	4 711	34 081	21 019	8 888	12 823
Nebraska -----	80	1 008	776	27 654	17 605	175 019	118 217	57 885	63 246
Nevada -----	18	309	221	8 504	5 704	74 328	35 127	16 600	18 795
New Hampshire -----	60	332	223	6 827	4 240	32 450	19 792	14 667	8 483
New Jersey -----	270	4 347	3 132	128 506	80 206	661 275	389 547	261 789	134 252
New Mexico -----	70	493	386	9 622	6 869	32 408	20 974	11 239	(D)
New York -----	411	4 767	3 268	164 576	101 526	1 020 051	497 458	325 880	194 308
North Carolina -----	190	5 480	3 936	122 837	84 329	632 104	392 110	217 183	186 788
North Dakota -----	37	357	285	8 240	5 736	38 340	29 137	16 808	12 329
Ohio -----	406	5 530	3 936	154 271	98 674	908 944	529 112	300 469	254 492
Oklahoma -----	77	924	715	24 186	17 279	117 745	75 083	46 048	29 816
Oregon -----	109	1 377	976	45 515	24 980	430 672	170 020	118 621	68 217
Pennsylvania -----	295	4 634	3 341	144 436	94 060	684 467	389 011	262 344	135 891
Rhode Island -----	27	397	290	15 760	10 896	(D)	70 119	22 762	(D)
South Carolina -----	159	4 227	3 359	96 151	66 299	497 802	212 004	106 806	112 501
South Dakota -----	*12	(D)	*54	(D)	792	(D)	(D)	(D)	(D)
Tennessee -----	203	4 727	3 746	112 321	78 650	606 296	325 130	168 579	162 794
Texas -----	562	6 265	4 495	152 236	87 501	864 149	517 899	263 169	277 606
Utah -----	57	759	606	20 442	15 047	113 257	60 796	28 984	31 924
Vermont -----	11	324	229	9 375	6 920	(D)	(D)	13 359	16 124
Virginia -----	141	2 218	1 601	52 503	32 429	288 409	163 327	90 114	77 911
Washington -----	203	4 369	3 394	157 878	106 849	1 164 809	605 657	320 154	296 769
West Virginia -----	69	709	564	16 006	11 772	61 953	48 589	33 378	16 363
Wisconsin -----	156	4 639	3 619	158 755	123 463	703 260	412 575	269 814	160 553
Wyoming -----	22	461	386	15 304	12 681	51 192	35 032	25 767	9 536

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
9 618 518	1 349 414	252 084	149 752	1 606 808	143 001	21 461 568	6 881 749	1	1	3	U.S.
108 048	18 898	15 406	4 454	28 908	8 758	584 147	321 037	3	4	12	AL
53 186	7 411	3 094	2 728	(S)	361	55 960	25 622	5	6	2	AK
138 112	32 663	4 407	2 299	16 371	1 087	185 471	55 587	7	9	28	AZ
83 800	(D)	1 030	945	10 795	1 017	85 364	29 723	9	7	30	AR
1 026 804	221 449	28 811	10 987	100 383	11 169	2 643 336	761 244	4	3	10	CA
69 463	10 395	2 304	1 333	*15 767	1 125	143 897	49 684	6	10	15	CO
137 466	3 646	2 357	(S)	8 121	1 356	193 194	82 871	9	8	(S)	CT
47 293	(D)	1 733	(S)	*6 839	427	41 939	15 859	8	11	(S)	DE
(S)	—	(S)	—	(S)	(S)	(S)	(S)	(D)	(D)	—	DC
386 430	38 717	13 550	4 582	42 865	4 548	595 060	170 901	4	4	20	FL
235 087	64 583	7 087	4 315	34 718	5 219	674 156	240 091	6	4	17	GA
70 733	*6 149	(S)	1 060	19 393	373	73 971	28 240	6	3	9	HI
48 721	2 753	613	530	8 392	2 238	(D)	134 661	9	10	21	ID
531 953	106 068	8 818	7 878	82 338	4 808	776 477	203 067	4	4	24	IL
208 370	37 057	4 293	4 872	58 076	4 554	577 711	197 201	4	4	18	IN
58 639	(S)	1 685	1 429	15 248	1 565	149 205	54 356	7	7	18	IA
49 962	12 403	2 415	1 469	14 189	1 248	163 750	48 113	7	5	19	KS
190 824	21 134	3 833	4 487	31 880	2 493	318 885	99 086	6	7	31	KY
57 593	16 387	4 149	1 744	21 917	1 898	155 487	73 682	6	6	17	LA
18 869	(S)	776	(D)	12 935	365	66 774	13 692	11	7	(D)	ME
53 418	*1 750	1 503	*1 228	11 203	2 327	246 329	110 129	12	9	48	MD
113 777	10 009	1 607	685	21 138	3 148	607 382	164 943	12	7	18	MA
436 779	90 892	8 816	4 387	68 134	5 925	1 140 377	352 453	8	5	10	MI
(D)	*13 001	12 734	4 314	49 846	1 603	289 067	109 654	26	(D)	26	MN
69 295	17 398	2 182	1 446	13 866	1 204	144 574	40 221	9	7	30	MS
390 152	25 638	7 103	6 132	86 512	4 963	962 729	358 337	3	2	7	MO
*13 062	*1 366	*223	*1 367	*7 540	*168	25 765	6 672	28	36	70	MT
56 802	8 814	683	2 281	38 357	737	86 354	28 269	11	6	14	NE
39 201	*2 968	368	201	2 113	540	115 753	33 494	15	14	25	NV
12 658	*1 409	482	98	5 264	764	(D)	33 391	20	19	31	NH
271 728	44 012	4 854	4 251	37 817	3 915	696 373	227 424	3	3	5	NJ
11 433	*5 017	(S)	*740	6 417	643	77 820	25 675	22	18	46	NM
522 593	49 192	11 385	5 263	88 649	7 435	1 171 459	435 828	4	3	8	NY
239 994	41 001	7 390	5 245	43 738	8 606	1 248 633	257 847	4	3	20	NC
9 203	2 044	*586	561	4 319	366	32 143	10 027	17	15	15	ND
379 832	84 438	12 727	7 983	87 881	6 328	1 026 470	306 643	4	4	13	OH
42 662	4 007	866	*1 156	8 713	592	57 246	21 728	14	12	40	OK
260 653	2 495	4 764	1 010	13 083	1 068	129 056	50 410	9	6	19	OR
295 456	44 971	7 823	7 377	71 137	7 009	(D)	307 851	4	6	24	PA
(D)	16 827	2 347	(D)	7 995	950	269 141	41 493	5	1	(D)	RI
285 798	27 557	6 506	2 922	37 063	6 181	1 272 287	443 024	5	6	25	SC
*619	—	*176	*170	2 645	227	21 672	7 861	(D)	(D)	52	SD
281 166	23 620	6 499	4 244	49 633	3 864	438 788	168 375	4	3	11	TN
346 250	64 940	17 039	11 608	93 579	10 411	810 846	323 973	5	6	7	TX
52 461	6 125	5 699	3 759	20 299	726	109 874	32 195	12	10	17	UT
(D)	(S)	759	(D)	4 286	278	40 920	10 680	6	(D)	(D)	VT
125 083	9 885	2 928	2 569	36 312	2 753	392 775	98 034	5	7	10	VA
559 152	80 067	8 449	4 610	32 410	1 878	329 949	97 038	3	2	7	WA
13 364	1 465	698	343	9 346	685	53 197	28 778	14	10	21	WV
290 685	55 115	3 434	5 680	86 383	2 830	369 335	134 820	3	2	11	WI
16 159	3 665	2 245	560	5 508	153	20 108	5 795	10	6	22	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	7 693	7 014	7 435	8 259	2	2	1	2
Proprietors and working partners	1 666	962	1 359	2 867	5	8	5	5
All employees**	122 970	143 001	153 821	202 070	1	1	1	(Z)
Construction workers:								
March	87 242	104 202	117 040	151 301	1	1	1	(Z)
May	90 555	108 678	124 264	169 142	1	1	1	(Z)
August	96 786	116 929	126 577	184 358	2	1	1	(Z)
November	93 689	113 322	115 135	177 970	1	1	1	1
Average	92 068	110 785	121 517	170 787	1	1	1	(Z)
Other employees:								
March	31 888	31 640	32 238	30 337	1	1	1	1
May	30 507	32 008	(NA)	(NA)	1	1	(NA)	(NA)
August	30 722	32 609	(NA)	(NA)	1	1	(NA)	(NA)
November	30 492	32 616	(NA)	(NA)	1	1	(NA)	(NA)
Average	30 902	32 215	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	3 476 400	3 618 878	3 231 000	2 852 817	1	1	(Z)	(Z)
Payroll, construction workers	2 309 756	2 496 936	2 344 085	2 247 193	1	1	(Z)	(Z)
Payroll, other employees	1 166 644	1 121 942	886 914	605 623	1	1	1	(Z)
First-quarter payroll, all employees	790 414	833 713	770 770	594 176	1	1	(Z)	(Z)
Fringe benefits, all employees	867 970	862 348	581 050	539 369	1	1	(Z)	(Z)
Legally required expenditures	544 922	554 902	432 397	315 495	1	1	(Z)	(Z)
Voluntary expenditures	323 048	307 446	148 652	223 875	1	1	1	(Z)
Dollar value of business done	20 991 436	22 316 867	18 107 888	13 063 111	1	1	(Z)	1
Value of construction work	20 585 807	21 461 568	17 834 735	12 855 514	1	1	(Z)	(Z)
Value of construction work subcontracted in from others	1 349 414	1 143 085	835 351	351 937	3	3	(NA)	(NA)
Other business receipts	405 629	855 299	273 153	207 597	3	1	1	1
Net value of construction work†	10 967 289	11 094 502	9 293 778	7 545 253	1	1	(Z)	(Z)
Value added††	6 437 735	6 881 749	5 755 674	4 257 546	1	1	(Z)	(Z)
Selected costs	14 553 701	15 435 118	12 352 213	8 805 565	1	1	(Z)	1
Materials, components, and supplies	4 776 342	4 897 508	3 680 814	3 377 489	1	1	1	(Z)
Construction work subcontracted out to others	9 618 518	10 367 065	8 540 956	5 310 261	1	1	(Z)	1
Selected power, fuels, and lubricants	158 841	170 543	130 442	117 815	2	2	1	1
Electricity	31 225	29 785	23 988	21 841	2	1	1	1
Natural and manufactured gas	8 285	9 366	7 158	10 203	2	1	1	1
Gasoline and diesel fuel	110 391	119 340	90 585	65 433	2	2	1	1
On highway use	88 927	96 819	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use	21 464	22 520	(NA)	(NA)	4	10	(NA)	(NA)
Other, including lubricating oils and greases	8 940	12 051	8 710	20 338	3	1	2	1
Rental cost for machinery, equipment, and buildings	252 084	245 238	163 301	135 838	3	1	1	1
For machinery and equipment	183 523	174 985	129 922	114 051	3	2	1	1
For buildings	68 562	70 252	33 379	21 787	3	2	2	1
Selected purchased services	170 148	171 554	127 122	109 938	3	1	1	2
Communication services	59 499	60 352	43 916	40 783	2	1	1	5
Repairs to buildings and other structures	13 232	13 647	8 500	8 403	5	3	2	2
Repairs to machinery and equipment	97 416	97 554	74 705	60 751	3	1	1	1
Ownership of construction projects:								
Value of construction work	20 585 807	21 461 568	17 834 735	12 855 514	1	1	(Z)	(Z)
Government owned	3 935 179	3 464 059	2 204 610	1 343 270	2	1	2	(Z)
Federal	1 510 496	1 536 865	(NA)	(NA)	3	2	(NA)	(NA)
State and local	2 424 683	1 927 194	(NA)	(NA)	2	2	(NA)	(NA)
Privately owned	16 650 628	17 997 508	15 630 124	11 512 244	2	1	(Z)	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 592 611	1 263 969	2	2
Capital expenditures, other than land -----	149 752	206 643	3	2
New -----	115 231	165 243	3	2
Used -----	34 520	41 399	6	5
Retirements and disposition of depreciable assets -----	(S)	88 359	(S)	3
End-of-year gross book value of depreciable assets -----	1 606 808	1 382 253	2	2
Depreciation charges during year -----	163 717	154 276	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	357 420	335 495	4	4
Capital expenditures, other than land -----	16 249	38 761	14	4
New buildings and other structures -----	13 317	34 110	17	4
Used buildings and other structures -----	2 933	4 651	18	11
Retirements and disposition of depreciable assets -----	(S)	17 679	(S)	8
End-of-year gross book value of depreciable assets -----	293 370	356 577	4	4
Depreciation charges during year -----	24 374	28 166	4	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 235 191	928 474	2	2
Capital expenditures, other than land -----	133 503	167 881	3	2
New machinery and equipment, including automobiles and trucks -----	101 915	131 133	3	2
New automobiles and trucks, intended primarily for highway use -----	37 001	55 362	5	3
Used machinery and equipment, including automobiles and trucks -----	31 588	36 748	6	5
Retirements and disposition of depreciable assets -----	55 256	70 680	7	3
End-of-year gross book value of depreciable assets -----	1 313 438	1 025 675	2	2
Depreciation charges during year -----	139 344	126 110	2	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	7 693	2
Value of construction work	20 585 807	1
Establishments with inventories:		
Number	1 734	3
Value of construction work	5 372 125	1
Inventories ¹ :		
End of 1992, materials and supplies	57 213	6
End of 1991, materials and supplies	59 029	6
Establishments with no inventories:		
Number	3 759	3
Value of construction work	11 361 043	1
Establishments not reporting:		
Number	2 199	3
Value of construction work	3 852 639	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	7 693	3 182	1 900	1 324	902	228	118	23	11	6
All employees** -----	122 970	6 556	12 690	17 545	26 965	15 899	17 035	7 694	7 715	10 873
Payroll, all employees -----	3 476 400	139 289	280 782	433 532	788 891	480 780	521 186	241 054	237 618	353 269
Dollar value of business done -----	20 991 436	1 082 534	1 670 694	2 648 173	4 733 594	3 139 335	3 335 371	1 168 900	1 313 958	1 898 877
Value of construction work -----	20 585 807	1 045 770	1 632 586	2 607 027	4 650 058	3 097 821	3 265 942	1 147 121	1 267 546	1 871 937
Net value of construction work† -----	10 967 289	587 491	949 587	1 516 254	2 437 593	1 488 188	1 574 282	601 507	876 190	936 196
Value added†† -----	6 437 735	330 404	558 308	863 475	1 351 622	853 571	940 054	378 363	459 151	702 786
Cost of materials, components, supplies, and fuels -----	4 935 183	293 851	429 387	693 926	1 169 507	676 131	703 657	244 923	463 451	260 350
Cost of construction work subcontracted out to others -----	9 618 518	458 279	682 999	1 090 772	2 212 464	1 609 633	1 691 660	545 614	391 356	935 741
Rental cost for machinery, equipment, and buildings -----	252 084	15 975	27 939	39 179	50 425	29 948	33 131	18 983	10 449	26 055
Capital expenditures, other than land -----	149 752	14 644	15 163	25 224	38 454	23 780	19 154	3 988	5 509	3 836
End-of-year gross book value of depreciable assets -----	1 606 808	132 423	190 083	237 881	425 762	234 218	203 886	58 603	58 067	65 886
1987										
All employees** -----	143 001	5 847	10 672	17 786	30 313	20 367	22 599	8 897	5 044	21 471
Value of construction work -----	21 461 568	998 067	1 279 393	2 417 274	4 348 923	3 233 935	3 884 650	1 568 865	3 730 460	(D)
Value added†† -----	6 881 749	310 626	457 969	840 076	1 428 642	933 141	1 141 456	721 039	(D)	1 048 800
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	5	5	4	2	(Z)	7	(Z)	(Z)	(Z)
Net value of construction work† -----	1	6	5	3	2	(Z)	2	(Z)	(Z)	(Z)
Capital expenditures, other than land -----	3	15	14	8	2	(Z)	3	(Z)	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	7 693	(S)	(S)	550	1 085	1 334	1 449	1 378	651	389	363
All employees** -----	122 970	(S)	(S)	958	3 248	7 143	10 717	17 282	16 205	15 344	51 567
Payroll, all employees -----	3 476 400	(S)	(S)	10 725	44 868	120 777	224 718	429 522	431 030	451 545	1 758 485
Dollar value of business done -----	20 991 436	(S)	(S)	38 740	175 019	482 840	1 043 513	2 207 060	2 247 380	2 727 036	12 058 516
Value of construction work -----	20 585 807	(S)	(S)	38 033	171 158	468 644	1 009 473	2 157 256	2 207 550	2 694 652	11 827 790
Net value of construction work† -----	10 967 289	(S)	(S)	31 440	132 950	346 433	692 098	1 331 713	1 328 909	1 468 866	5 625 964
Value added†† -----	6 437 735	(S)	(S)	18 037	84 309	209 155	437 661	737 386	752 672	824 720	3 368 464
Cost of materials, components, supplies, and fuels -----	4 935 183	(S)	(S)	14 110	52 502	151 474	288 477	644 131	616 068	676 531	2 488 226
Cost of construction work subcontracted out to others -----	9 618 518	(S)	(S)	(S)	38 208	122 211	317 375	825 543	878 640	1 225 785	6 201 826
Rental cost for machinery, equipment, and buildings -----	252 084	(S)	(S)	572	4 202	9 383	26 570	30 744	31 021	29 531	119 961
Capital expenditures, other than land -----	149 752	(S)	(S)	*587	2 918	7 422	19 050	18 395	22 314	22 456	56 554
End-of-year gross book value of depreciable assets -----	1 606 808	(S)	(S)	7 397	26 893	83 971	167 549	252 498	238 411	227 572	601 478
1987											
All employees** -----	143 001	(S)	(S)	901	3 844	7 014	8 978	19 954	20 063	16 362	65 417
Value of construction work -----	21 461 568	(S)	(S)	29 367	165 883	436 265	771 825	2 230 515	2 442 564	2 643 736	12 733 147
Value added†† -----	6 881 749	(S)	(S)	17 162	81 618	207 360	303 917	850 992	902 800	797 306	3 716 149
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	12	8	7	6	3	7	1	(Z)
Net value of construction work† -----	1	(S)	(S)	10	7	6	5	4	4	1	1
Capital expenditures, other than land -----	3	(S)	(S)	48	32	18	14	11	4	2	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

4-8 INDUSTRIAL BUILDINGS AND WAREHOUSES

CONSTRUCTION—INDUSTRY SERIES

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	20 585 807	13 607 277	5 167 045	1 605 091	1	1	1	2
Building construction	20 212 133	13 491 718	5 128 033	1 592 382	1	1	1	2
Single-family houses	286 179	184 246	78 434	23 498	4	4	7	10
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	125 953	73 406	37 687	14 860	7	12	4	13
Other residential buildings, including hotels, motels, and tourist cabins	308 170	285 820	19 492	2 858	2	2	22	10
Office buildings	1 274 718	832 250	391 049	51 420	2	3	3	4
Other commercial buildings such as stores, restaurants, and automobile service stations	917 351	635 917	251 768	29 666	2	2	2	5
Industrial buildings and warehouses	15 360 914	10 223 994	3 752 876	1 384 044	1	1	1	2
Industrial buildings	12 495 762	7 990 006	3 257 302	1 248 454	1	1	1	2
Warehouses	2 865 152	2 233 988	495 574	135 590	2	2	5	4
Religious buildings	169 383	102 706	58 417	8 260	3	5	5	12
Educational buildings	567 204	364 966	178 038	24 200	1	2	2	4
Hospitals and institutional buildings	936 148	593 483	309 143	33 522	1	1	1	9
Amusement, social, and recreational buildings, indoors	105 413	63 895	27 318	14 200	3	4	4	6
Other nonresidential buildings	160 698	131 033	23 812	5 853	4	4	9	16
Nonbuilding construction	167 281	115 559	39 012	12 709	3	4	1	14
Construction work, n.s.k.	206 394	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
1987								
Value of construction work	21 461 568	15 455 435	4 247 698	1 536 161	1	1	1	1
Building construction	20 386 878	14 829 588	4 082 287	1 475 002	1	1	1	1
Single-family houses	227 510	150 298	58 626	18 585	4	5	6	8
Other residential buildings, including hotels, motels, and tourist cabins	283 754	231 650	47 973	4 131	1	1	4	10
Office buildings	1 688 344	1 272 576	380 166	35 601	1	1	2	7
Other commercial buildings such as stores, restaurants, and automobile service stations	1 098 192	833 992	226 967	37 233	1	1	3	4
Industrial buildings and warehouses	15 777 425	11 481 842	2 954 814	1 340 768	1	1	1	1
Industrial buildings	12 346 040	8 600 367	2 489 655	1 256 017	1	1	1	1
Warehouses	3 431 385	2 881 475	465 158	84 751	2	2	3	5
Educational buildings	358 045	229 839	115 926	12 279	2	2	3	7
Hospitals and institutional buildings	440 284	247 050	188 150	5 083	1	1	2	11
Other nonresidential buildings	513 324	382 341	109 665	21 332	1	1	12	11
Nonbuilding construction	852 418	625 848	165 411	61 159	1	1	1	4
Construction work, n.s.k.	222 271	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
All establishments -----	7 693	122 970	3 476 400	20 585 807	11 920 119	10 967 289	6 437 735	9 618 518	1	1	1
Establishments not specializing by type -----	1 573	27 465	752 990	5 321 895	(NA)	2 599 418	1 345 518	2 722 477	4	2	3
Establishments specializing 51 percent or more -----	6 120	95 505	2 723 410	15 263 912	11 920 119	8 367 870	5 092 216	6 896 042	1	1	1
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	4 935	84 679	2 412 719	13 210 865	10 331 115	7 285 980	4 544 716	5 924 886	1	1	1
Establishments with —											
100 percent specialization -----	2 096	35 461	947 444	3 825 999	3 825 999	2 403 371	1 616 380	1 422 628	1	2	3
90 to 99 percent specialization -----	642	9 993	292 066	1 467 031	1 373 659	905 655	569 913	561 375	4	3	3
80 to 89 percent specialization -----	488	5 952	162 147	1 141 372	945 549	584 358	354 211	557 014	4	2	2
70 to 79 percent specialization -----	565	9 152	257 668	1 504 955	1 109 204	775 595	458 997	729 360	4	3	2
60 to 69 percent specialization -----	671	12 563	375 842	2 630 679	1 646 316	1 230 437	716 637	1 400 242	2	2	1
51 to 59 percent specialization -----	473	11 558	377 552	2 640 830	1 430 389	1 386 564	828 576	1 254 266	3	1	1
WAREHOUSES											
All establishments specializing in type -----	1 016	9 470	280 133	1 957 287	1 493 245	1 019 944	509 116	937 343	4	3	3
Establishments with —											
100 percent specialization -----	336	2 590	67 994	404 134	404 134	261 881	161 666	142 254	8	6	7
90 to 99 percent specialization -----	46	256	7 769	65 551	60 565	24 500	12 720	41 051	24	18	17
80 to 89 percent specialization -----	131	1 736	59 960	443 439	363 602	(S)	(S)	232 675	9	4	3
70 to 79 percent specialization -----	124	1 477	45 480	303 729	224 335	149 391	84 727	154 338	8	6	7
60 to 69 percent specialization -----	221	2 246	68 090	565 704	346 385	276 635	100 873	289 068	9	6	8
51 to 59 percent specialization -----	158	1 166	30 841	174 730	94 223	96 773	59 158	77 957	11	9	7

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	7 693	92 068	87 242	90 555	96 786	93 689	2	1	1	1	2	1
Alabama	163	5 643	5 499	6 001	5 982	5 091	14	3	3	3	3	4
Alaska	32	778	377	862	1 023	850	16	4	6	3	7	4
Arizona	80	903	768	901	1 021	921	17	8	8	9	8	8
Arkansas	59	660	640	680	647	672	19	9	7	8	8	12
California	885	5 916	5 654	5 977	6 058	5 974	7	5	5	4	7	5
Colorado	99	584	592	504	565	675	16	6	7	6	6	6
Connecticut	73	504	402	496	485	(S)	16	12	10	9	9	(S)
Delaware	30	607	606	500	551	772	36	5	5	6	7	6
District of Columbia	4	(S)	(S)	(S)	(S)	(S)	62	(S)	(S)	(S)	(S)	(S)
Florida	310	3 512	3 553	3 189	3 537	3 769	10	4	5	5	4	5
Georgia	214	2 646	2 477	2 443	2 992	2 673	13	6	4	5	9	7
Hawaii	32	581	584	646	546	550	14	7	6	9	7	12
Idaho	45	424	417	379	479	421	18	8	7	9	9	9
Illinois	325	3 915	3 789	3 699	4 242	3 931	11	4	4	4	5	6
Indiana	206	2 816	2 587	2 770	3 073	2 834	12	4	3	4	4	4
Iowa	110	1 280	1 178	1 216	1 362	1 364	16	7	6	6	7	8
Kansas	88	824	650	746	1 011	889	17	7	9	7	6	7
Kentucky	131	2 292	2 141	2 102	2 495	(S)	15	6	5	6	6	(S)
Louisiana	147	1 840	1 605	1 778	1 917	2 061	17	6	8	7	5	9
Maine	50	306	176	202	410	433	31	12	17	15	15	7
Maryland	59	782	612	1 185	672	659	25	11	10	7	13	16
Massachusetts	145	720	585	730	755	811	14	13	14	13	12	14
Michigan	293	2 798	2 472	2 776	3 078	2 868	11	7	5	7	9	9
Minnesota	112	3 338	3 035	3 444	3 559	3 314	14	32	36	32	31	31
Mississippi	125	1 643	1 410	1 650	1 811	1 701	17	9	9	9	10	10
Missouri	197	3 010	2 894	3 091	3 082	2 975	13	4	4	4	4	3
Montana	31	163	151	166	170	165	23	29	30	29	31	30
Nebraska	80	776	606	807	825	867	21	11	12	9	12	11
Nevada	18	221	250	203	231	200	22	16	18	17	15	16
New Hampshire	60	223	234	193	216	248	24	22	20	22	22	31
New Jersey	270	3 132	2 968	3 175	3 335	3 049	11	3	3	3	3	3
New Mexico	70	386	340	386	370	448	28	22	24	23	25	19
New York	411	3 268	3 086	3 125	3 334	3 527	9	4	4	4	4	5
North Carolina	190	3 936	5 053	3 660	3 532	3 497	12	4	3	5	5	4
North Dakota	37	285	212	239	314	375	34	16	22	17	19	13
Ohio	406	3 936	3 341	3 841	4 321	4 243	8	4	4	5	5	5
Oklahoma	77	715	666	691	749	757	20	16	16	18	19	14
Oregon	109	976	932	858	1 183	929	15	10	12	11	9	11
Pennsylvania	295	3 341	3 158	3 364	3 377	3 465	10	4	4	5	5	5
Rhode Island	27	290	258	274	321	306	34	6	6	5	6	6
South Carolina	159	3 359	3 218	3 277	3 502	3 437	14	4	4	4	5	5
South Dakota	*12	*54	47	46	*69	*54	62	42	32	33	54	42
Tennessee	203	3 746	3 675	3 725	3 867	3 718	13	5	4	4	7	5
Texas	562	4 495	4 395	4 168	4 568	4 848	8	5	5	5	6	7
Utah	57	606	556	591	675	603	24	13	11	9	15	14
Vermont	11	229	238	228	204	246	26	5	5	5	6	5
Virginia	141	1 601	1 537	1 583	1 657	1 629	14	5	6	5	5	5
Washington	203	3 394	3 078	3 575	3 510	3 413	13	3	2	3	4	3
West Virginia	69	564	506	576	567	606	25	13	12	14	14	12
Wisconsin	156	3 619	3 487	3 457	4 026	3 507	13	3	2	3	3	3
Wyoming	22	386	506	335	466	238	29	8	10	5	16	7

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	20 585 807	7 647	16 525 627	2 158	4 060 180	21 461 568	-4.1	1	1	
Alabama -----	365 098	163	287 318	64	77 780	252 542	44.6	6	8	1
Alaska -----	184 716	32	147 747	7	36 969	73 651	150.8	5	6	(Z)
Arizona -----	254 015	80	218 506	31	35 509	217 121	17.0	6	6	8
Arkansas -----	165 388	59	100 254	48	65 133	118 531	39.5	5	9	2
California -----	1 979 050	884	1 704 955	52	274 095	2 742 037	-27.8	2	2	1
Colorado -----	321 810	98	111 026	21	210 784	153 100	110.2	4	10	1
Connecticut -----	259 104	73	234 941	21	24 163	223 261	16.1	4	4	9
Delaware -----	78 717	30	69 035	17	9 682	52 581	49.7	21	24	3
District of Columbia -----	(S)	(S)	(S)	*22	13 895	34 173	-31.4	(S)	(S)	3
Florida -----	929 664	310	816 253	48	113 411	693 870	34.0	9	10	3
Georgia -----	652 553	214	449 229	101	203 324	818 557	-20.3	3	5	3
Hawaii -----	244 907	32	165 414	12	79 493	75 491	224.4	1	2	(Z)
Idaho -----	110 377	43	80 630	43	29 747	80 809	36.6	12	16	16
Illinois -----	986 224	325	823 325	95	162 898	932 263	5.8	4	5	1
Indiana -----	599 756	201	463 260	95	136 496	585 238	2.5	3	3	1
Iowa -----	211 956	110	158 599	44	53 356	158 927	33.4	6	8	5
Kansas -----	155 080	88	94 654	36	60 427	162 911	-4.8	6	9	8
Kentucky -----	410 714	129	271 231	73	139 483	357 807	14.8	4	6	2
Louisiana -----	235 422	147	188 028	37	47 394	194 783	20.9	5	6	1
Maine -----	57 598	(S)	(D)	14	(D)	72 942	-21.0	6	(D)	(D)
Maryland -----	136 522	59	104 283	49	32 239	236 239	-42.2	8	9	16
Massachusetts -----	290 109	145	219 941	28	70 168	801 684	-63.8	4	6	1
Michigan -----	905 529	292	791 406	73	114 123	2 127 126	-57.4	4	5	(Z)
Minnesota -----	423 263	111	346 093	65	77 170	284 378	48.8	8	9	1
Mississippi -----	199 267	125	160 213	44	39 054	162 068	23.0	5	6	3
Missouri -----	513 647	193	451 946	49	61 701	573 068	-10.4	3	3	4
Montana -----	34 245	(S)	32 696	*12	*1 548	20 023	71.0	34	35	58
Nebraska -----	170 632	80	150 245	33	20 387	79 288	115.2	4	5	5
Nevada -----	152 565	18	73 873	26	78 692	137 292	11.1	5	10	4
New Hampshire -----	31 727	60	28 967	6	2 759	53 550	-40.8	21	23	(Z)
New Jersey -----	667 581	264	605 003	60	62 578	745 473	-10.4	3	4	5
New Mexico -----	59 050	(S)	32 307	24	26 743	90 511	-34.8	8	14	7
New York -----	911 809	405	869 788	53	42 021	1 457 370	-37.4	3	3	1
North Carolina -----	803 130	189	576 132	84	226 998	703 135	14.2	3	4	1
North Dakota -----	56 443	37	27 169	15	29 273	34 377	64.2	8	16	2
Ohio -----	913 238	404	773 274	75	139 964	1 046 716	-12.8	3	4	2
Oklahoma -----	166 535	77	99 608	48	66 927	70 744	135.4	9	14	1
Oregon -----	457 359	106	330 231	35	127 128	147 618	209.8	5	7	1
Pennsylvania -----	745 662	295	656 767	74	88 894	908 025	-17.9	5	5	4
Rhode Island -----	154 852	(S)	(D)	5	(D)	127 365	21.6	1	(D)	(D)
South Carolina -----	351 775	159	305 821	48	45 953	534 751	-34.2	5	6	2
South Dakota -----	13 620	*11	1 611	44	12 009	21 118	-35.5	10	39	10
Tennessee -----	551 142	203	472 471	60	78 670	589 492	-6.5	3	4	5
Texas -----	907 100	560	800 260	50	106 840	886 285	2.3	5	5	(Z)
Utah -----	96 566	57	84 888	14	11 679	97 884	-1.3	8	9	2
Vermont -----	76 294	(S)	(D)	5	(D)	38 930	96.0	5	(D)	(D)
Virginia -----	366 597	140	258 238	55	108 359	602 337	-39.1	4	5	(Z)
Washington -----	1 303 028	202	971 792	48	331 237	349 666	272.6	2	2	4
West Virginia -----	109 436	69	39 243	31	70 193	98 056	11.6	5	13	1
Wisconsin -----	751 103	155	568 904	44	182 199	406 645	84.7	2	2	1
Wyoming -----	40 403	18	35 138	18	5 265	29 733	35.9	14	16	2

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business -----	20 991 436	22 316 867	1	1
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS				
General building contractor -----	17 769 064	20 570 340	1	1
General building contractor, remodeling ¹ -----	2 339 113	74 026	2	7
Operative builder -----	38 987	48 337	7	13
SPECIAL TRADE CONTRACTORS				
Millwright -----	115 871	19 561	(Z)	1
Other construction activities -----	244 391	772 620	3	(NA)
OTHER BUSINESS ACTIVITIES				
Building construction on land owned by you, for rent or lease -----	40 209	71 999	11	8
Construction management services -----	168 354	(NA)	4	(NA)
Other business activities -----	179 116	601 412	4	(NA)
Kind of business activity, n.s.k. -----	96 331	158 572	2	3

¹In 1987, this item, for the most part, represented the value of residential remodeling general contractor work. For 1992, it represents the value of both residential and nonresidential remodeling general contractor work.

Table 12. **Selected Industry Ratios for Establishments With Payroll: 1992 and 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	16.0	20.4	2
Number of construction workers	12.0	15.8	2
Number of all other employees	4.0	4.6	2
Payroll, all employees \$1,000 ..	451.9	516.0	2
Payroll, construction workers do ..	300.2	356.0	2
Payroll, other employees do ..	151.7	160.0	2
Dollar value of business done do ..	2 728.7	3 181.8	2
Value of construction work do ..	2 676.0	3 059.8	2
Cost of materials, components, supplies, and fuels do ..	641.5	722.6	2
Construction work subcontracted to others do ..	1 250.3	1 478.1	2
Rental cost for machinery, equipment, and buildings do ..	32.8	35.0	3
Capital expenditures, other than land do ..	19.5	29.5	3
Gross book value of depreciable assets do ..	208.9	197.1	2
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	28.3	25.3	1
Dollar value of business done do ..	170.7	156.1	1
Value added†† do ..	52.4	48.1	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	25.1	22.5	1
Value of construction work do ..	223.6	193.7	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	37.8	34.8	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.169	.169	1
Cost of materials, components, supplies, and fuels do ..	.240	.236	1
Cost of construction work subcontracted out to others do ..	.467	.483	(Z)
Value of construction work subcontracted in from others do ..	.066	.053	3
Rental cost for machinery, equipment, and buildings do ..	.012	.011	2

Table 13. **Selected Industry Ratios for Establishments With Payroll by State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	16.0	28.3	223.6	.169	.240	.467	.066	.012
Alabama -----	41.2	25.9	87.6	.353	.266	.219	.038	.031
Alaska -----	28.6	30.6	196.1	.181	.201	.349	.049	.020
Arizona -----	16.2	26.3	257.1	.147	.227	.595	.141	.019
Arkansas -----	13.9	22.0	240.0	.114	.313	.529	(D)	.007
California -----	9.7	32.4	311.6	.151	.207	.557	.120	.016
Colorado -----	8.7	29.0	235.0	.182	.229	.506	.076	.017
Connecticut -----	9.8	31.6	472.2	.096	.113	.578	.015	.010
Delaware -----	23.6	32.8	157.7	.244	(D)	.494	(D)	.018
District of Columbia -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	16.5	27.5	279.3	.143	.350	.394	.039	.014
Georgia -----	16.2	26.5	198.5	.174	.261	.448	.123	.013
Hawaii -----	25.7	40.7	284.7	.201	(S)	.428	*.037	(S)
Idaho -----	13.3	26.3	241.3	.153	.260	.476	.027	.006
Illinois -----	15.5	33.9	266.9	.164	.212	.509	.102	.008
Indiana -----	17.7	28.7	179.6	.207	.267	.412	.073	.008
Iowa -----	14.3	24.4	149.2	.202	.379	.307	(S)	.009
Kansas -----	12.3	24.9	180.5	.181	.372	.336	.083	.016
Kentucky -----	22.1	23.4	157.7	.188	(D)	.528	.058	.011
Louisiana -----	15.8	20.5	106.7	.244	.293	.293	.083	.021
Maine -----	8.0	23.7	164.4	.189	(D)	.375	(S)	.015
Maryland -----	17.1	24.6	152.0	.208	.316	.449	.015	.013
Massachusetts -----	7.9	32.5	313.8	.166	.143	.504	.044	.007
Michigan -----	13.1	30.2	303.9	.136	.216	.514	.107	.010
Minnesota -----	37.8	28.1	343.8	.103	(D)	(D)	*.011	.011
Mississippi -----	16.3	16.9	122.5	.171	.278	.344	.086	.011
Missouri -----	20.7	32.2	294.0	.149	(D)	.441	.029	.008
Montana -----	7.7	27.3	209.1	.194	.376	.383	*.040	*.007
Nebraska -----	12.6	27.4	225.5	.158	.361	.325	.050	.004
Nevada -----	17.0	27.5	336.3	.114	.253	.527	*.040	.005
New Hampshire -----	5.5	20.6	145.5	.210	.261	.390	.043	.015
New Jersey -----	16.1	29.6	211.1	.194	.203	.411	.067	.007
New Mexico -----	7.0	19.5	84.0	.297	(D)	.353	*.155	(S)
New York -----	11.6	34.5	312.1	.161	.190	.512	.048	.011
North Carolina -----	28.8	22.4	160.6	.194	.296	.380	.065	.012
North Dakota -----	9.5	23.1	134.5	.215	.322	.240	.053	.015
Ohio -----	13.6	27.9	230.9	.170	.280	.418	.093	.014
Oklahoma -----	11.9	26.2	164.7	.205	.253	.362	.034	.007
Oregon -----	12.6	33.1	441.3	.106	.158	.605	.006	.011
Pennsylvania -----	15.7	31.2	204.9	.211	.199	.432	.066	.011
Rhode Island -----	14.7	39.7	(D)	(D)	(D)	(D)	(D)	(D)
South Carolina -----	26.5	22.7	148.2	.193	.226	.574	.055	.013
South Dakota -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Tennessee -----	23.2	23.8	161.9	.185	.269	.464	.039	.011
Texas -----	11.1	24.3	192.2	.176	.321	.401	.075	.020
Utah -----	13.3	26.9	186.9	.180	.282	.463	.054	.050
Vermont -----	30.1	28.9	(D)	(D)	(D)	(D)	(D)	(D)
Virginia -----	15.8	23.7	180.1	.182	.270	.434	.034	.010
Washington -----	21.5	36.1	343.2	.136	.255	.480	.069	.007
West Virginia -----	10.3	22.6	109.8	.258	.264	.216	.024	.011
Wisconsin -----	29.7	34.2	194.3	.226	.228	.413	.078	.005
Wyoming -----	21.2	33.2	132.6	.299	.186	.316	.072	.044

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

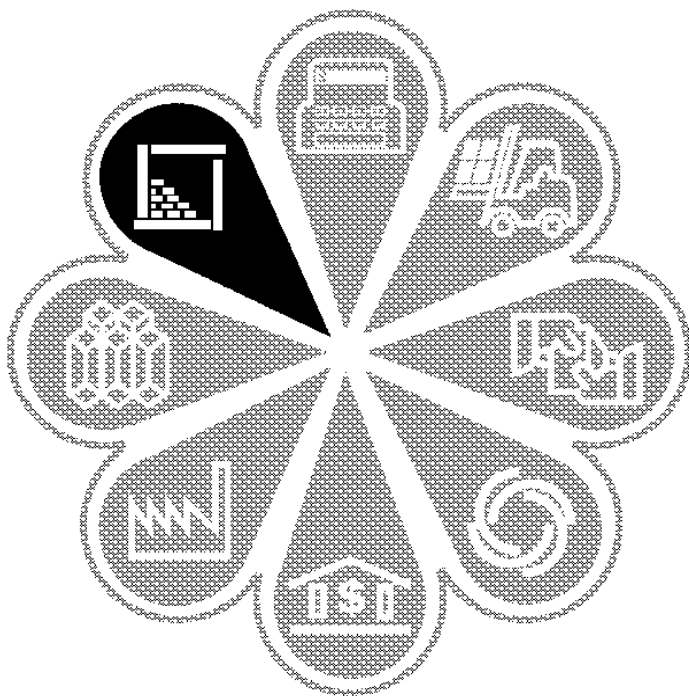
Census of Construction Industries

CC92-I-5

INDUSTRY SERIES

General Contractors— Nonresidential Buildings, Other Than Industrial Buildings and Warehouses

Industry 1542



1992

Census of

Construction Industries

CC92-I-5

INDUSTRY SERIES

General Contractors— Nonresidential Buildings, Other Than Industrial Buildings and Warehouses

Industry 1542

Issued October 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Juliana Van Berkum**, **Jennifer L. Evans**, **Susan L. Hostetter**, **Doris M. Kling**, **Carolyn J. Stone**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke**. Under the direction of **C. Lloyd Anderson**, the Systems Support Staff maintained the small computers and assisted in the management of computer output.

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If you have any questions concerning the statistics in this report, call 301-457-4680.



**Economics and Statistics
Administration**

Everett M. Ehrlich, Under Secretary
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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records, however, resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year— buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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General Contractors— Nonresidential Buildings, Other Than Industrial Buildings and Warehouses

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**Statistics for Establishments Without Payroll appear in the U.S. Industry
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Summary of Findings

Establishments classified in this industry are primarily engaged in the construction of commercial, institutional, religious, and amusement and recreational buildings (including new work, additions, alterations, remodeling, and repair). For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$95.7 billion in total dollar value of business. Of this amount, \$94.0 billion were for the value of construction work. These establishments paid out \$18.1 billion for materials, components, and supplies and \$55.1 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$796 million. Value added for 1992 was \$21.8 billion.

There were 29,739 establishments with total employment averaging 407,138 during the year. Total payroll for 1992 was \$11.8 billion.

Larger establishments with 20 employees or more, while representing only 15 percent of the total number of

employer establishments in this industry, accounted for 75 percent of all business done.

A “construction establishment” is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

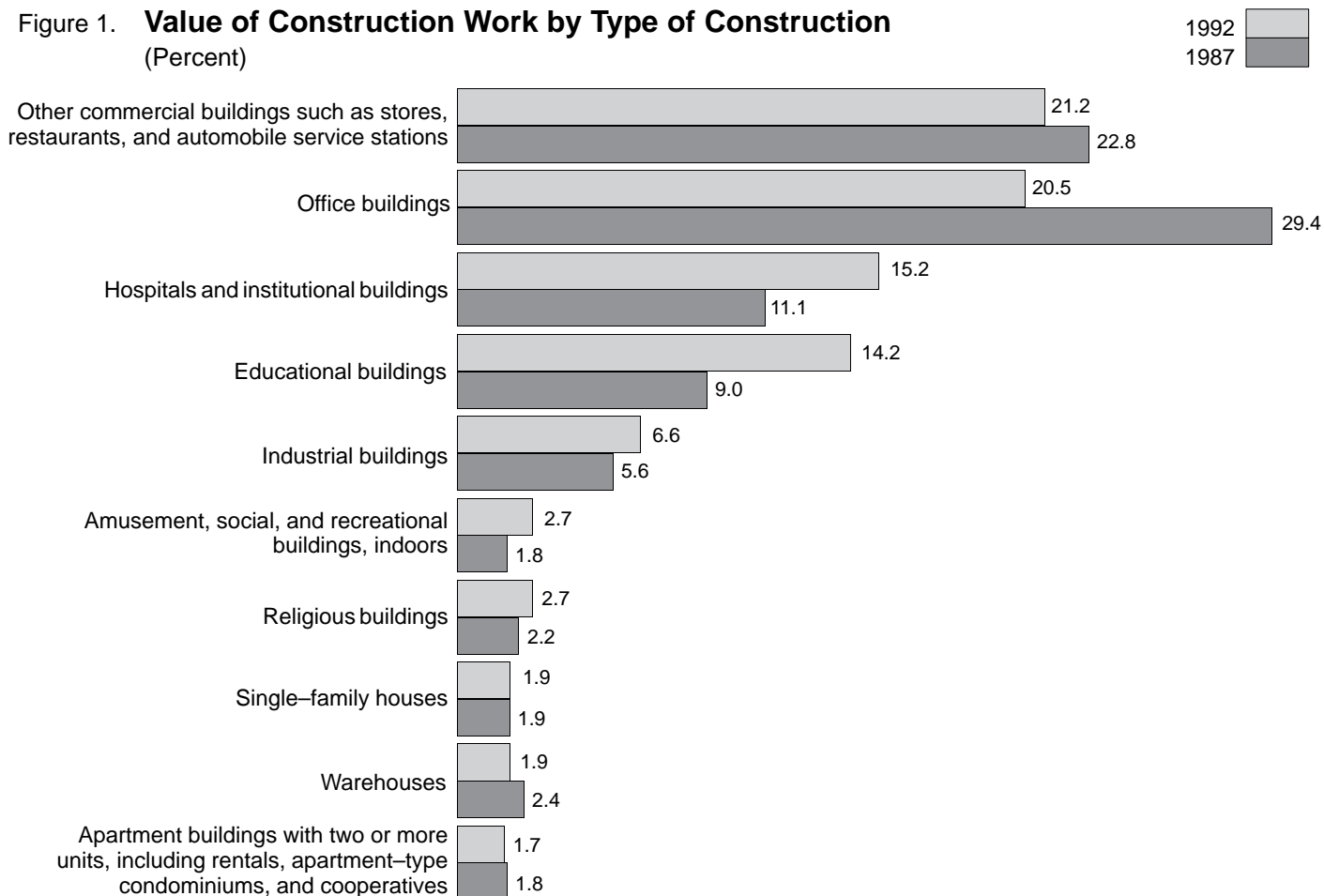


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

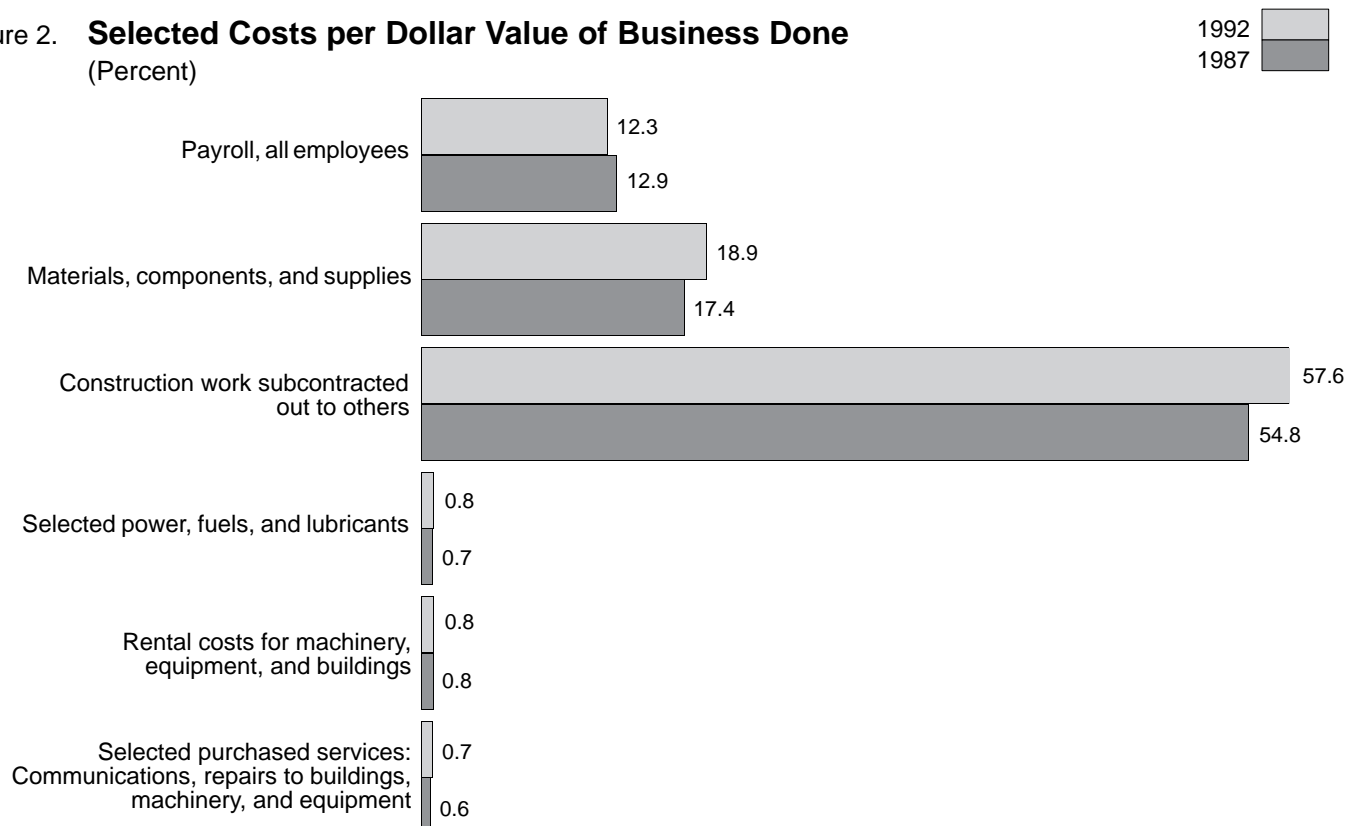


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	29 739	407 138	285 952	11 803 969	7 182 947	93 986 840	38 913 401	21 753 615	18 862 161
Alabama -----	416	9 640	7 210	238 901	149 164	1 866 014	800 967	340 077	478 722
Alaska -----	135	1 597	1 161	69 834	46 712	376 945	217 519	134 645	85 491
Arizona -----	454	7 812	4 966	243 044	139 475	2 692 216	953 863	677 252	290 933
Arkansas -----	322	4 240	3 233	88 946	59 136	843 937	395 485	201 925	205 387
California -----	3 487	38 868	25 780	1 371 144	791 350	11 654 025	4 346 889	2 735 470	1 737 819
Colorado -----	520	9 052	6 479	271 982	171 984	2 667 086	1 131 482	615 673	537 978
Connecticut -----	414	4 419	2 844	160 790	91 627	1 314 341	469 475	246 816	242 174
Delaware -----	99	1 056	711	28 817	15 500	250 909	115 247	70 011	50 795
District of Columbia -----	61	2 274	1 615	72 687	41 919	549 125	171 232	108 400	68 845
Florida -----	1 872	20 515	13 885	504 459	278 800	4 215 323	1 740 617	900 386	875 485
Georgia -----	831	14 756	10 350	370 607	215 507	3 082 659	1 306 529	635 369	706 496
Hawaii -----	218	3 711	2 669	140 808	90 944	813 594	432 075	218 345	220 346
Idaho -----	172	2 664	1 928	65 113	39 395	441 583	204 610	117 666	116 244
Illinois -----	1 301	15 834	10 818	537 765	338 703	4 330 652	1 590 374	985 411	721 049
Indiana -----	522	10 506	8 031	297 456	204 775	1 669 682	894 109	556 466	367 461
Iowa -----	376	5 411	4 156	136 732	94 430	997 100	481 435	259 204	246 582
Kansas -----	361	5 143	3 747	124 735	78 280	1 256 030	610 594	321 846	301 212
Kentucky -----	398	6 031	4 643	142 134	95 883	996 866	482 671	243 514	255 101
Louisiana -----	368	5 298	4 101	108 173	73 004	870 704	432 757	213 929	227 897
Maine -----	121	1 028	738	25 859	16 261	209 698	91 410	52 503	46 369
Maryland -----	778	12 903	8 730	402 879	233 727	3 082 781	1 268 569	832 885	553 469
Massachusetts -----	731	7 813	4 953	254 391	139 980	2 300 667	835 234	419 185	436 809
Michigan -----	808	10 186	6 853	315 543	185 798	2 564 043	998 785	464 168	610 787
Minnesota -----	560	7 394	5 238	237 926	153 098	2 075 227	811 122	535 635	314 919
Mississippi -----	253	3 975	2 994	76 689	49 485	570 681	294 184	131 124	167 227
Missouri -----	781	8 386	5 909	224 366	138 025	1 784 379	683 860	388 783	333 078
Montana -----	110	1 209	938	26 082	18 450	184 887	89 049	28 426	63 363
Nebraska -----	311	2 773	2 068	56 146	37 176	399 112	192 752	100 685	101 215
Nevada -----	226	2 205	1 590	67 601	45 372	598 256	227 143	149 736	94 256
New Hampshire -----	97	1 318	889	40 692	22 660	281 158	105 920	73 333	51 208
New Jersey -----	872	10 110	6 946	348 267	211 512	2 506 283	1 257 986	805 954	516 344
New Mexico -----	233	3 721	2 819	99 838	64 210	633 549	338 185	200 940	139 676
New York -----	1 883	22 550	14 981	790 218	456 267	5 563 580	2 296 448	1 465 237	1 082 208
North Carolina -----	745	13 017	9 678	310 356	190 969	2 303 139	1 011 855	486 397	548 583
North Dakota -----	129	1 240	1 018	25 093	17 569	178 570	96 653	44 130	54 158
Ohio -----	1 217	16 104	10 709	457 105	272 392	3 449 300	1 426 004	749 491	752 085
Oklahoma -----	375	5 136	3 735	98 901	63 277	870 775	372 697	169 856	209 048
Oregon -----	406	4 170	3 003	126 078	79 629	927 207	376 048	208 972	177 668
Pennsylvania -----	1 208	19 851	14 272	625 674	413 102	4 635 315	1 872 285	1 137 402	891 439
Rhode Island -----	135	1 967	1 330	51 098	29 382	461 519	243 186	153 531	97 470
South Carolina -----	375	5 703	4 226	133 538	83 450	938 151	456 084	227 919	241 165
South Dakota -----	144	1 518	1 165	31 793	22 423	253 358	143 541	76 466	69 200
Tennessee -----	540	10 315	7 374	246 915	148 548	2 076 727	748 343	379 294	385 844
Texas -----	1 694	25 650	17 814	651 063	370 931	6 295 322	2 524 307	1 117 805	1 461 591
Utah -----	218	3 891	2 830	99 344	64 474	934 192	361 116	216 246	159 264
Vermont -----	122	1 787	1 290	47 311	28 306	361 812	165 632	86 344	80 683
Virginia -----	696	10 469	7 361	283 974	164 774	2 215 492	846 191	381 436	487 990
Washington -----	861	10 219	7 413	321 009	208 214	2 434 798	993 731	485 576	526 648
West Virginia -----	194	2 035	1 615	45 852	34 490	223 044	134 836	86 021	52 044
Wisconsin -----	506	9 039	6 663	295 680	193 368	1 688 776	830 970	491 955	398 576
Wyoming -----	85	628	484	12 558	9 040	96 251	41 346	23 775	21 756

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
55 073 439	2 906 477	786 089	543 254	5 178 776	488 480	89 793 431	24 830 667	(Z)	(Z)	2	U.S.
1 065 046	34 751	16 288	7 981	100 181	13 075	2 225 696	450 271	3	2	8	AL
159 426	11 240	3 948	5 204	32 486	2 769	426 884	204 992	13	16	12	AK
1 738 353	47 255	21 536	9 957	118 609	6 977	1 642 403	465 505	3	2	4	AZ
448 451	(S)	11 981	5 050	43 112	4 633	571 098	170 131	4	5	13	AR
7 307 136	272 308	102 897	47 411	445 597	49 251	11 875 924	2 983 346	1	1	4	CA
1 535 604	52 461	17 666	23 051	99 861	9 364	2 166 885	546 277	3	2	3	CO
844 867	48 982	10 062	5 247	32 555	8 690	1 894 541	694 447	3	3	10	CT
135 663	6 945	1 667	795	11 031	1 130	179 836	45 675	5	3	22	DE
377 893	23 494	2 959	435	15 284	2 926	618 816	115 214	6	5	1	DC
2 474 706	119 888	38 674	17 287	175 629	29 275	4 661 665	1 218 976	3	3	12	FL
1 776 129	51 362	41 859	12 799	151 554	17 151	3 286 314	765 438	2	2	7	GA
381 519	17 039	6 868	6 849	70 733	2 825	516 841	188 830	3	4	12	HI
236 974	10 637	2 907	3 950	42 427	1 253	202 591	51 386	7	6	35	ID
2 740 278	162 430	26 806	30 693	240 501	21 890	4 172 725	1 257 118	2	2	16	IL
775 573	83 710	10 756	11 371	113 932	9 037	1 300 643	394 492	2	2	8	IN
515 664	16 907	6 087	8 525	79 282	4 792	719 968	187 575	4	2	14	IA
645 436	93 802	17 383	10 883	82 911	5 236	861 120	244 720	4	3	20	KS
514 195	32 854	9 152	12 692	61 477	5 431	726 998	204 885	3	3	7	KY
437 948	20 268	5 193	3 498	45 805	6 483	910 398	224 511	6	7	11	LA
118 289	*8 153	1 750	713	17 580	2 563	317 027	91 723	11	9	30	ME
1 814 212	72 125	19 542	12 411	169 692	16 726	3 345 732	906 432	2	2	9	MD
1 465 434	70 870	13 482	7 500	102 346	13 440	2 528 221	767 358	3	3	11	MA
1 565 259	105 312	16 634	19 192	163 034	10 838	2 216 361	578 151	3	3	8	MI
1 264 105	42 789	10 167	15 269	134 968	7 912	1 681 795	316 380	4	3	5	MN
276 496	27 758	4 033	5 130	45 093	4 306	532 056	126 783	4	4	18	MS
1 100 518	92 409	11 860	8 219	114 575	11 256	2 094 156	677 353	3	4	11	MO
95 839	*3 941	1 448	3 048	17 186	1 018	141 287	40 056	9	7	12	MT
206 360	11 515	3 595	5 437	44 573	3 163	435 551	131 741	6	6	19	NE
371 114	25 544	6 728	3 822	30 361	2 087	416 718	104 441	6	5	20	NV
175 238	16 992	2 389	2 032	28 495	3 293	498 313	141 497	4	7	9	NH
1 248 298	94 308	22 374	11 257	127 921	15 310	2 899 495	942 045	2	2	13	NJ
295 364	19 916	5 891	3 616	35 593	3 100	471 352	139 220	5	3	26	NM
3 267 132	254 105	41 589	28 656	258 223	30 219	6 007 129	1 989 955	2	2	5	NY
1 291 283	35 569	19 641	11 854	226 234	13 173	2 026 515	597 499	2	2	8	NC
81 917	*3 538	1 020	2 091	19 489	1 045	121 942	33 644	6	5	22	ND
2 023 296	223 647	25 773	31 696	254 043	16 802	3 294 245	961 420	2	2	11	OH
498 078	8 081	11 081	5 332	46 362	4 452	640 077	150 301	3	3	19	OK
551 159	22 560	13 519	8 176	48 295	3 214	683 032	165 370	5	4	33	OR
2 763 030	161 128	37 434	24 774	287 106	22 163	3 932 849	1 177 028	2	2	6	PA
218 332	17 270	2 629	1 271	9 994	1 920	448 428	96 451	3	4	24	RI
482 067	21 456	8 675	5 448	65 792	7 113	882 236	248 366	3	3	14	SC
109 817	3 385	3 123	4 006	31 917	1 211	140 492	45 219	8	9	9	SD
1 328 385	44 224	15 699	14 299	118 696	13 554	2 253 954	584 658	2	2	16	TN
3 771 014	164 783	69 107	26 858	244 712	34 889	6 107 616	1 439 212	2	2	6	TX
573 076	9 945	6 775	7 335	51 195	3 152	636 672	175 794	4	4	15	UT
196 180	1 787	3 761	2 018	23 041	2 232	306 608	77 046	5	4	8	VT
1 369 301	58 289	14 193	9 851	131 092	14 466	2 245 655	565 368	3	3	9	VA
1 441 066	84 029	22 812	14 692	115 180	11 049	2 041 106	606 002	3	2	9	WA
88 208	5 643	2 784	2 720	24 767	1 957	176 259	72 440	8	5	18	WV
857 806	78 122	10 703	19 939	157 098	7 587	1 174 550	436 955	2	2	3	WI
54 905	(S)	*1 192	*914	11 160	1 057	134 633	30 947	13	11	45	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	29 739	31 337	22 112	18 467	1	1	1	1
Proprietors and working partners	6 676	4 784	4 682	7 481	3	4	3	3
All employees**	407 138	488 480	359 856	311 588	(Z)	(Z)	(Z)	(Z)
Construction workers:								
March	267 944	342 442	262 170	224 057	(Z)	(Z)	(Z)	(Z)
May	284 544	361 771	277 805	251 907	1	1	(Z)	(Z)
August	306 902	392 270	294 283	278 415	1	1	(Z)	(Z)
November	284 420	371 002	269 370	262 203	1	1	(Z)	(Z)
Average	285 952	366 871	278 193	254 360	(Z)	(Z)	(Z)	(Z)
Other employees:								
March	121 770	120 699	81 416	55 820	(Z)	1	1	(Z)
May	121 862	121 409	(NA)	(NA)	(Z)	1	(NA)	(NA)
August	121 556	122 298	(NA)	(NA)	1	1	(NA)	(NA)
November	119 555	122 044	(NA)	(NA)	1	1	(NA)	(NA)
Average	121 186	121 613	(NA)	(NA)	(Z)	1	(NA)	(NA)
Payroll, all employees	11 803 969	11 842 710	7 260 046	4 274 933	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	7 182 947	7 755 933	5 084 654	3 189 805	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	4 621 021	4 086 776	2 175 392	1 085 128	(Z)	(Z)	(Z)	(Z)
First-quarter payroll, all employees	2 697 173	2 666 992	1 677 757	888 523	1	(Z)	(Z)	(Z)
Fringe benefits, all employees	2 939 942	2 680 400	1 348 806	863 668	1	(Z)	(Z)	(Z)
Legally required expenditures	1 910 282	1 780 371	991 426	483 485	1	(Z)	(Z)	(Z)
Voluntary expenditures	1 029 659	900 029	357 379	380 183	1	(Z)	(Z)	(Z)
Dollar value of business done	95 689 214	91 698 973	52 824 851	27 400 418	(Z)	(Z)	(Z)	(Z)
Value of construction work	93 986 840	89 793 431	52 304 554	27 137 768	(Z)	(Z)	(Z)	(Z)
Value of construction work subcontracted in from others	2 906 477	3 024 631	1 101 307	422 085	2	2	2	2
Other business receipts	1 702 374	1 905 541	520 297	262 649	1	1	1	2
Net value of construction work†	38 913 401	39 510 241	21 546 587	12 816 028	(Z)	(Z)	(Z)	(Z)
Value added††	21 753 615	24 830 667	12 512 366	7 112 256	(Z)	(Z)	(Z)	(Z)
Selected costs	73 935 600	66 868 306	40 312 485	20 288 148	(Z)	(Z)	(Z)	(Z)
Materials, components, and supplies	18 066 238	15 984 990	9 221 961	5 716 533	(Z)	1	(Z)	(Z)
Construction work subcontracted out to others	55 073 439	50 283 190	30 757 966	14 321 740	(Z)	(Z)	(Z)	(Z)
Selected power, fuels, and lubricants	795 923	600 125	332 557	249 875	1	1	1	1
Electricity	287 895	123 906	76 137	54 786	1	1	1	1
Natural and manufactured gas	44 188	34 593	19 329	26 461	2	2	1	1
Gasoline and diesel fuel	422 377	404 289	213 704	126 433	1	1	1	1
On highway use	353 184	337 666	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	69 192	66 622	(NA)	(NA)	2	1	(NA)	(NA)
Other, including lubricating oils and greases	41 463	37 337	23 385	42 197	2	2	1	1
Rental cost for machinery, equipment, and buildings	786 089	720 585	382 584	186 287	1	1	1	(Z)
For machinery and equipment	494 738	463 535	291 640	149 013	2	1	(Z)	(Z)
For buildings	291 350	257 050	90 943	37 274	1	1	1	1
Selected purchased services	665 079	524 397	277 681	191 570	1	1	1	1
Communication services	263 732	206 968	117 359	75 391	1	1	1	2
Repairs to buildings and other structures	59 796	46 304	22 018	16 060	3	2	1	3
Repairs to machinery and equipment	341 551	271 124	138 303	100 120	2	1	1	1
Ownership of construction projects:								
Value of construction work	93 986 840	89 793 431	52 304 554	27 137 768	(Z)	(Z)	(Z)	(Z)
Government owned	31 296 622	19 268 927	10 016 229	8 425 879	1	1	1	(Z)
Federal	7 431 103	5 530 635	(NA)	(NA)	2	1	(NA)	(NA)
State and local	23 865 518	13 738 291	(NA)	(NA)	1	1	(NA)	(NA)
Privately owned	62 690 219	70 524 504	42 288 325	18 711 890	1	1	(Z)	(Z)

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	4 994 310	4 021 836	1	2
Capital expenditures, other than land -----	543 254	571 238	2	2
New -----	426 676	444 253	2	2
Used -----	116 578	126 984	4	3
Retirements and disposition of depreciable assets -----	358 788	247 266	5	2
End-of-year gross book value of depreciable assets -----	5 178 776	4 345 808	1	2
Depreciation charges during year -----	534 618	528 284	1	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	1 075 124	1 170 111	2	5
Capital expenditures, other than land -----	78 835	123 161	4	3
New buildings and other structures -----	67 336	83 138	4	4
Used buildings and other structures -----	11 499	40 023	5	7
Retirements and disposition of depreciable assets -----	118 527	62 029	4	4
End-of-year gross book value of depreciable assets -----	1 035 432	1 231 243	2	4
Depreciation charges during year -----	73 579	105 626	2	7
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	3 919 186	2 851 724	1	1
Capital expenditures, other than land -----	464 419	448 076	2	2
New machinery and equipment, including automobiles and trucks -----	359 340	361 115	2	2
New automobiles and trucks, intended primarily for highway use -----	149 116	185 959	4	2
Used machinery and equipment, including automobiles and trucks -----	105 079	86 961	4	3
Retirements and disposition of depreciable assets -----	240 261	185 236	7	2
End-of-year gross book value of depreciable assets -----	4 143 343	3 114 565	1	1
Depreciation charges during year -----	461 038	422 658	1	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	29 739	1
Value of construction work	93 986 840	(Z)
Establishments with inventories:		
Number	6 387	2
Value of construction work	24 245 673	1
Inventories ¹ :		
End of 1992, materials and supplies	308 950	4
End of 1991, materials and supplies	251 685	5
Establishments with no inventories:		
Number	13 795	1
Value of construction work	49 416 850	(Z)
Establishments not reporting:		
Number	9 557	1
Value of construction work	20 324 317	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	29 739	13 602	6 839	4 757	3 100	930	397	79	27	8
All employees** -----	407 138	26 827	44 880	64 421	92 797	63 416	58 759	27 834	18 307	9 898
Payroll, all employees -----	11 803 969	518 238	1 060 556	1 735 313	2 752 463	2 032 935	1 898 690	937 998	587 623	280 153
Dollar value of business done -----	95 689 214	4 324 706	7 193 145	12 123 667	21 489 982	16 415 291	18 028 901	8 205 292	5 429 728	2 478 503
Value of construction work -----	93 986 840	4 264 929	7 062 895	11 947 428	21 227 237	16 119 028	17 750 425	7 900 649	5 257 560	2 456 690
Net value of construction work† -----	38 913 401	2 406 993	3 644 870	5 776 334	8 933 746	6 223 061	5 906 361	2 995 736	1 859 956	1 166 345
Value added†† -----	21 753 615	1 291 872	2 098 079	3 365 576	5 056 329	3 539 789	3 033 389	1 715 434	960 123	693 025
Cost of materials, components, supplies, and fuels -----	18 862 161	1 174 898	1 677 042	2 586 997	4 140 162	2 979 534	3 151 448	1 584 945	1 072 001	495 133
Cost of construction work subcontracted out to others -----	55 073 439	1 857 935	3 418 025	6 171 094	12 293 491	9 895 968	11 844 064	4 904 913	3 397 604	1 290 345
Rental cost for machinery, equipment, and buildings -----	786 089	49 467	67 616	111 889	162 508	126 628	140 454	105 736	(D)	21 790
Capital expenditures, other than land -----	543 254	47 527	60 866	83 137	111 368	87 267	129 607	(D)	12 498	10 984
End-of-year gross book value of depreciable assets -----	5 178 776	346 397	659 164	794 221	1 131 579	869 384	1 110 502	(D)	133 066	134 464
1987										
All employees** -----	488 480	27 010	48 950	74 757	114 115	81 026	68 482	36 062	20 512	17 563
Value of construction work -----	89 793 431	4 063 082	6 234 979	10 826 988	19 635 847	15 778 608	16 042 480	9 562 567	7 648 879	(D)
Value added†† -----	24 830 667	1 325 414	2 029 296	3 460 630	5 514 887	4 140 848	3 980 248	2 355 663	1 330 187	693 491
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	(Z)	2	2	2	1	(Z)	(Z)	(Z)	(Z)	(Z)
Net value of construction work† -----	(Z)	3	3	2	1	(Z)	(Z)	(Z)	(Z)	(Z)
Capital expenditures, other than land -----	2	9	10	5	2	(Z)	(Z)	(D)	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	29 739	(S)	(S)	(S)	4 559	4 833	4 570	5 044	2 602	1 651	1 868
All employees** -----	407 138	(S)	(S)	3 470	12 565	21 300	31 476	55 758	50 041	52 607	177 381
Payroll, all employees -----	11 803 969	(S)	(S)	42 179	179 483	366 692	630 708	1 389 190	1 389 883	1 594 889	6 188 766
Dollar value of business done -----	95 689 214	(S)	(S)	153 176	763 573	1 723 577	3 268 230	7 918 697	9 130 317	11 479 670	61 191 314
Value of construction work -----	93 986 840	(S)	(S)	148 597	749 847	1 696 624	3 210 931	7 781 123	8 979 177	11 335 869	60 024 596
Net value of construction work† -----	38 913 401	(S)	(S)	117 127	564 377	1 174 183	2 022 134	4 387 455	4 482 948	5 028 200	21 089 199
Value added†† -----	21 753 615	(S)	(S)	69 458	327 881	669 397	1 151 109	2 585 407	2 501 430	2 870 681	11 551 608
Cost of materials, components, supplies, and fuels -----	18 862 161	(S)	(S)	52 248	250 222	531 739	928 324	1 939 622	2 132 658	2 301 321	10 704 308
Cost of construction work subcontracted out to others -----	55 073 439	(S)	(S)	(S)	185 471	522 441	1 188 797	3 393 668	4 496 230	6 307 669	38 935 398
Rental cost for machinery, equipment, and buildings -----	786 089	(S)	(S)	3 430	10 488	24 157	44 850	78 509	86 750	105 962	430 545
Capital expenditures, other than land -----	543 254	(S)	(S)	(S)	12 075	27 127	37 199	76 978	66 243	69 251	251 142
End-of-year gross book value of depreciable assets -----	5 178 776	(S)	(S)	26 545	95 393	241 545	362 334	676 633	701 235	648 551	2 417 703
1987											
All employees** -----	488 480	(S)	(S)	(S)	16 350	25 181	40 327	70 505	67 811	64 950	195 743
Value of construction work -----	89 793 431	(S)	(S)	(S)	834 870	1 757 823	3 548 017	8 616 749	10 054 443	11 860 574	52 906 270
Value added†† -----	24 830 667	(S)	(S)	(S)	383 580	718 665	1 334 214	2 943 736	3 219 900	3 361 380	12 763 382
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	(S)	(S)	7	4	4	3	2	2	1	(Z)
Net value of construction work† -----	(Z)	(S)	(S)	5	4	3	3	2	2	1	(Z)
Capital expenditures, other than land -----	2	(S)	(S)	(S)	12	10	9	9	5	2	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	93 986 840	59 660 281	29 605 477	3 220 743	(Z)	(Z)	1	1
Building construction	90 610 897	58 235 899	29 251 931	3 123 067	(Z)	(Z)	1	1
Single-family houses	1 815 743	1 032 404	637 648	145 691	2	2	3	4
Single-family houses, detached	1 437 807	806 056	529 162	102 589	2	3	3	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	377 937	226 348	108 486	43 102	2	2	4	4
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	1 613 401	1 037 115	497 954	78 332	1	1	3	5
Other residential buildings, including hotels, motels, and tourist cabins	1 504 269	1 021 745	444 714	37 810	1	1	1	4
Hotels, motels, and tourist cabins	1 019 055	705 971	291 239	21 846	1	1	1	4
Other residential buildings	485 213	315 774	153 475	15 965	2	3	3	6
Office buildings	19 263 171	10 461 014	7 979 933	822 223	1	1	1	2
Other commercial buildings such as stores, restaurants, and automobile service stations	19 887 592	13 075 505	6 116 734	695 353	1	1	1	3
Industrial buildings and warehouses	8 014 241	5 607 928	2 044 832	361 481	(Z)	(Z)	1	2
Industrial buildings	6 227 887	4 271 637	1 665 571	290 679	(Z)	(Z)	1	2
Warehouses	1 786 354	1 336 290	379 261	70 803	1	1	2	3
Religious buildings	2 528 329	1 625 334	832 668	70 327	2	2	3	6
Educational buildings	13 360 653	8 927 570	4 189 041	244 041	1	1	2	5
Hospitals and institutional buildings	14 266 761	9 474 980	4 523 926	267 856	(Z)	(Z)	1	2
Farm buildings, nonresidential	961 469	793 543	98 452	69 475	4	4	7	12
Amusement, social, and recreational buildings, indoors	2 556 005	1 969 872	545 086	41 048	2	2	3	4
Other nonresidential buildings	4 839 263	3 208 889	1 340 944	289 430	1	1	2	4
Nonbuilding construction	1 875 604	1 424 382	353 546	97 676	1	1	1	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	428 347	404 715	17 001	6 631	1	1	9	15
Bridges, tunnels, and elevated highways	256 626	126 152	123 163	7 311	1	3	(Z)	1
Sewage treatment and water treatment plants	511 812	403 736	101 818	6 259	1	1	2	21
Other nonbuilding construction	678 819	489 779	111 564	77 476	1	2	2	2
Construction work, n.s.k.	1 500 339	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
1987								
Value of construction work	89 793 431	62 922 133	22 451 376	2 481 494	(Z)	(Z)	1	1
Building construction	85 968 429	61 633 448	21 936 784	2 398 198	(Z)	(Z)	1	1
Single-family houses	1 746 350	1 116 019	524 178	106 153	2	2	3	4
Single-family houses, detached	1 333 895	783 367	457 555	92 972	2	3	3	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	412 455	332 652	66 622	13 180	2	3	7	8
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	1 586 133	1 209 403	324 999	51 730	1	1	3	5
Other residential buildings, including hotels, motels, and tourist cabins	2 890 685	2 461 153	390 895	38 635	1	1	2	7
Hotels, motels, and tourist cabins	1 907 398	1 675 907	216 442	15 048	1	1	3	8
Other residential buildings	983 286	785 246	174 453	23 586	1	1	4	10
Office buildings	26 438 662	19 154 579	6 676 427	607 655	(Z)	(Z)	1	3
Other commercial buildings such as stores, restaurants, and automobile service stations	20 503 267	14 569 596	5 205 611	728 060	1	1	1	2
Industrial buildings and warehouses	7 243 757	5 411 855	1 531 673	300 228	1	1	1	2
Industrial buildings	5 062 087	3 613 717	1 198 173	250 196	1	1	1	2
Warehouses	2 181 669	1 798 137	333 500	50 032	1	1	2	5
Religious buildings	1 975 064	1 371 430	555 422	48 212	2	2	3	5
Educational buildings	8 048 930	5 381 754	2 509 590	157 585	1	1	2	6
Hospitals and institutional buildings	9 935 109	6 857 235	2 918 446	159 428	1	1	1	4
Farm buildings, nonresidential	873 340	714 651	98 451	60 237	5	5	10	9
Amusement, social, and recreational buildings, indoors	1 646 644	1 329 776	295 263	21 603	1	1	3	12
Other nonresidential buildings	3 080 482	2 055 991	905 825	118 665	2	2	3	7
Nonbuilding construction	1 886 576	1 288 686	514 593	83 296	1	1	2	4
Construction work, n.s.k.	1 938 429	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H		B	D	H
All establishments	29 739	407 138	11 803 969	93 986 840	40 964 082	38 913 401	21 753 615	55 073 439	(Z)	(Z)	(Z)
Establishments not specializing by type	7 748	170 846	5 212 068	43 151 513	(NA)	17 122 030	8 998 377	26 029 482	1	(Z)	(Z)
Establishments specializing 51 percent or more	21 991	236 292	6 591 901	50 835 328	40 964 082	21 791 371	12 755 238	29 043 956	1	1	1
OFFICE BUILDINGS											
All establishments specializing in type	5 168	53 133	1 634 931	11 877 456	9 580 035	4 872 890	3 102 030	7 004 566	1	1	1
Establishments with —											
100 percent specialization	2 032	18 136	540 836	3 512 351	3 512 351	1 498 321	936 275	2 014 030	3	2	3
90 to 99 percent specialization	560	5 668	188 009	1 358 331	1 258 555	574 907	395 634	783 424	4	3	3
80 to 89 percent specialization	613	6 848	252 728	1 822 181	1 501 000	566 632	463 501	1 255 549	4	3	2
70 to 79 percent specialization	764	7 818	230 438	1 871 074	1 370 771	872 626	528 711	998 448	4	3	3
60 to 69 percent specialization	699	8 116	229 077	1 630 284	1 016 652	734 698	443 406	895 586	3	2	2
51 to 59 percent specialization	501	6 547	193 841	1 683 234	920 707	625 706	334 504	1 057 528	4	2	2
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type	7 619	76 794	2 036 472	16 201 525	13 666 035	7 246 889	4 068 024	8 954 636	1	1	1
Establishments with —											
100 percent specialization	3 695	33 413	851 959	6 154 310	6 154 310	2 948 334	1 675 715	3 205 977	2	2	2
90 to 99 percent specialization	815	8 667	249 420	2 430 207	2 278 676	975 263	555 071	1 454 944	4	3	3
80 to 89 percent specialization	693	7 322	187 814	1 555 969	1 293 351	651 276	343 146	904 693	4	3	3
70 to 79 percent specialization	1 007	11 128	301 237	2 449 133	1 797 687	972 832	525 698	1 476 301	3	3	2
60 to 69 percent specialization	810	9 508	254 238	2 018 457	1 278 355	875 934	454 635	1 142 523	4	3	2
51 to 59 percent specialization	600	6 757	191 804	1 593 448	863 656	823 250	513 758	770 198	4	3	3
RELIGIOUS BUILDINGS											
All establishments specializing in type	621	4 732	110 508	812 352	600 528	405 170	249 345	407 183	7	7	8
Establishments with —											
100 percent specialization	169	749	16 620	101 625	101 625	53 373	28 354	48 252	16	19	19
90 to 99 percent specialization	41	347	8 782	43 252	40 826	25 530	12 205	17 721	33	28	23
80 to 89 percent specialization	84	600	13 111	135 287	110 431	59 986	39 005	75 302	20	16	16
70 to 79 percent specialization	91	1 077	27 316	194 645	142 233	93 929	57 046	100 716	12	14	18
60 to 69 percent specialization	158	1 421	32 206	259 392	161 766	123 617	81 391	135 775	12	15	15
51 to 59 percent specialization	77	539	12 474	78 152	43 647	48 735	31 343	29 416	19	15	18
EDUCATIONAL BUILDINGS											
All establishments specializing in type	2 226	35 810	1 033 067	8 674 077	6 589 243	3 365 094	1 846 981	5 308 983	2	1	2
Establishments with —											
100 percent specialization	523	5 426	154 337	1 343 078	1 343 078	566 051	330 649	777 027	5	6	8
90 to 99 percent specialization	305	4 250	132 144	1 174 325	1 098 970	449 312	267 565	725 013	5	3	3
80 to 89 percent specialization	334	5 543	158 546	1 307 942	1 083 865	497 482	238 864	810 460	4	4	5
70 to 79 percent specialization	340	6 877	192 920	1 567 886	1 149 741	567 962	314 607	999 925	4	3	2
60 to 69 percent specialization	443	6 607	188 453	1 484 553	935 161	620 326	350 581	864 227	3	3	3
51 to 59 percent specialization	280	7 106	206 668	1 796 292	978 428	663 961	344 716	1 132 331	3	2	2
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type	1 521	30 314	957 318	7 978 110	6 011 163	2 860 598	1 712 675	5 117 513	1	1	1
Establishments with —											
100 percent specialization	462	5 976	165 212	1 401 639	1 401 639	518 658	309 793	882 981	4	3	3
90 to 99 percent specialization	193	3 066	92 587	720 930	663 516	276 378	168 626	444 552	4	3	3
80 to 89 percent specialization	188	3 405	107 044	937 606	783 272	334 678	230 320	602 928	3	2	2
70 to 79 percent specialization	216	6 267	206 357	1 847 101	1 359 502	622 767	323 306	1 224 333	4	2	2
60 to 69 percent specialization	237	5 363	173 731	1 368 509	868 169	524 439	311 574	844 070	3	3	2
51 to 59 percent specialization	225	6 238	212 387	1 702 325	935 065	583 677	369 056	1 118 647	2	1	1
FARM BUILDINGS, NONRESIDENTIAL											
All establishments specializing in type	1 654	8 559	163 183	910 940	754 140	750 360	462 539	160 580	5	4	6
Establishments with —											
100 percent specialization	673	3 244	59 222	349 649	349 649	282 948	149 947	66 700	8	8	10
90 to 99 percent specialization	195	879	15 140	87 684	81 580	73 495	45 841	14 188	15	13	24
80 to 89 percent specialization	208	1 124	21 882	128 668	106 709	104 423	68 545	24 245	12	11	16
70 to 79 percent specialization	274	930	17 544	89 152	65 542	76 329	51 473	12 823	11	9	17
60 to 69 percent specialization	(S)	1 168	24 496	138 758	87 523	113 756	86 605	25 003	12	9	7
51 to 59 percent specialization	153	1 215	24 899	117 030	63 138	99 409	60 128	17 621	14	15	21
AMUSEMENT, SOCIAL, AND RECREATIONAL BUILDINGS, INDOORS											
All establishments specializing in type	533	5 381	127 047	988 110	816 239	481 633	295 108	506 477	4	3	3
Establishments with —											
100 percent specialization	(S)	3 045	63 165	427 253	427 253	174 808	89 245	252 445	4	4	4
90 to 99 percent specialization	32	223	4 422	30 103	27 462	15 385	9 523	14 718	31	33	38
80 to 89 percent specialization	(S)	421	15 714	89 059	73 105	55 308	30 066	33 751	13	6	6
70 to 79 percent specialization	36	371	10 637	154 590	109 670	(S)	(S)	49 541	17	7	9
60 to 69 percent specialization	77	665	17 723	198 673	129 807	76 891	43 338	121 782	10	6	6
51 to 59 percent specialization	(S)	655	15 386	88 432	48 941	54 192	(S)	34 240	19	10	15

5-10 NONRESIDENTIAL CONSTRUCTION, N.E.C.

CONSTRUCTION—INDUSTRY SERIES

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	29 739	285 952	267 944	284 544	306 902	284 420	1	(Z)	(Z)	1	1	1
Alabama	416	7 210	7 204	7 111	7 520	7 005	8	4	4	4	4	4
Alaska	135	1 161	869	969	1 494	1 314	12	14	15	13	17	17
Arizona	454	4 966	4 514	4 793	5 490	5 065	8	4	4	5	4	4
Arkansas	322	3 233	3 025	3 280	3 671	2 955	9	5	5	4	5	5
California	3 487	25 780	25 534	25 626	26 823	25 136	3	2	2	2	2	2
Colorado	520	6 479	6 032	6 150	6 981	6 754	7	3	3	3	3	4
Connecticut	414	2 844	2 538	2 774	3 191	2 875	8	4	4	5	4	4
Delaware	99	711	592	1 016	633	605	16	5	5	3	6	6
District of Columbia	61	1 615	1 692	1 624	1 601	1 541	15	7	9	10	9	10
Florida	1 872	13 885	13 350	14 388	14 157	13 647	4	3	3	3	3	3
Georgia	831	10 350	10 524	10 191	10 406	10 278	6	2	2	3	2	3
Hawaii	218	2 669	2 476	2 429	2 746	3 026	11	3	3	3	3	6
Idaho	172	1 928	1 635	1 899	2 214	1 964	13	8	7	9	8	8
Illinois	1 301	10 818	9 855	10 686	11 897	10 835	5	3	3	2	3	3
Indiana	522	8 031	7 168	7 933	8 852	8 171	7	2	3	2	2	2
Iowa	376	4 156	3 669	4 172	4 620	4 163	9	4	4	4	4	4
Kansas	361	3 747	3 503	3 842	3 995	3 650	9	4	4	4	4	4
Kentucky	398	4 643	4 459	4 560	4 723	4 828	8	3	4	3	3	3
Louisiana	368	4 101	3 815	4 166	4 241	4 181	9	6	6	6	8	6
Maine	121	738	632	716	778	825	16	12	11	13	13	13
Maryland	778	8 730	8 541	8 607	9 225	8 546	6	3	2	2	3	3
Massachusetts	731	4 953	4 713	4 855	5 483	4 762	6	4	3	4	5	4
Michigan	808	6 853	5 565	6 786	7 829	7 231	6	3	3	3	3	3
Minnesota	560	5 238	4 434	5 233	6 087	5 199	7	4	4	4	5	4
Mississippi	253	2 994	2 719	2 923	3 281	3 052	11	4	4	5	4	4
Missouri	781	5 909	5 527	5 976	6 364	5 770	7	4	3	3	4	4
Montana	110	938	713	930	1 099	1 011	17	9	9	10	10	7
Nebraska	311	2 068	2 025	2 045	2 149	2 053	10	6	6	7	6	6
Nevada	226	1 590	1 505	1 482	1 638	1 735	12	6	8	7	6	7
New Hampshire	97	889	821	883	973	880	16	5	5	4	4	5
New Jersey	872	6 946	6 417	6 642	7 698	7 027	5	3	3	3	3	3
New Mexico	233	2 819	2 526	2 770	3 154	2 826	12	5	4	6	5	5
New York	1 883	14 981	13 483	15 215	16 445	14 783	4	2	2	2	2	2
North Carolina	745	9 678	9 848	9 754	9 921	9 190	6	2	2	2	2	2
North Dakota	129	1 018	871	1 094	1 154	953	14	6	5	5	6	6
Ohio	1 217	10 709	9 749	10 439	11 874	10 773	5	2	2	2	2	2
Oklahoma	375	3 735	3 736	3 721	3 711	3 774	7	3	3	4	4	3
Oregon	406	3 003	2 950	2 992	3 169	2 903	9	5	5	5	5	5
Pennsylvania	1 208	14 272	13 645	14 163	15 496	13 784	5	2	2	3	3	3
Rhode Island	135	1 330	1 307	1 322	1 445	1 246	12	3	4	3	3	4
South Carolina	375	4 226	4 264	4 258	4 322	4 058	8	3	3	3	4	3
South Dakota	144	1 165	969	1 164	1 333	1 196	16	8	7	7	8	8
Tennessee	540	7 374	7 276	7 275	7 647	7 296	6	2	3	2	2	3
Texas	1 694	17 814	16 707	18 030	18 997	17 523	4	2	2	3	3	3
Utah	218	2 830	2 556	2 779	3 027	2 956	10	4	4	4	4	4
Vermont	122	1 290	1 132	1 205	1 411	1 412	18	6	5	5	6	7
Virginia	696	7 361	7 187	7 283	7 801	7 174	6	3	3	3	3	3
Washington	861	7 413	6 709	7 744	8 108	7 091	6	3	4	5	3	4
West Virginia	194	1 615	1 277	1 587	1 941	1 654	14	8	8	9	9	9
Wisconsin	506	6 663	5 287	6 562	7 589	7 214	8	2	2	3	3	2
Wyoming	85	484	399	504	501	533	19	12	12	13	12	15

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	93 986 840	29 518	79 174 584	8 453	14 812 256	89 793 432	4.7	(Z)	(Z)	(Z)
Alabama -----	1 322 337	414	1 166 985	163	155 352	1 504 332	-12.1	2	2	1
Alaska -----	(D)	134	(D)	15	62 026	504 518	(D)	(D)	16	(Z)
Arizona -----	1 835 938	452	1 591 745	130	244 193	1 733 576	5.9	2	3	1
Arkansas -----	(D)	319	(D)	91	111 803	583 784	(D)	(D)	5	2
California -----	12 567 729	3 484	11 009 347	261	1 558 382	12 380 181	1.5	1	1	2
Colorado -----	2 014 321	519	1 828 926	82	185 395	1 586 514	27.0	2	3	(Z)
Connecticut -----	1 344 976	405	1 128 130	183	216 846	1 713 590	-21.5	2	2	1
Delaware -----	320 368	99	188 612	115	131 755	206 762	54.9	3	5	1
District of Columbia -----	783 415	58	253 901	271	529 514	1 066 791	-26.6	2	5	2
Florida -----	5 009 616	1 862	4 044 307	306	965 309	5 411 566	-7.4	2	2	1
Georgia -----	2 906 644	809	2 415 114	269	491 530	3 056 741	-4.9	2	2	1
Hawaii -----	986 672	218	813 594	34	173 079	576 605	71.1	2	3	1
Idaho -----	363 467	170	290 766	74	72 701	264 603	37.4	6	7	4
Illinois -----	4 556 384	1 301	4 125 734	317	430 650	4 251 654	7.2	1	2	2
Indiana -----	1 718 699	517	1 465 574	218	253 124	1 128 202	52.3	2	2	2
Iowa -----	844 591	376	753 795	177	90 795	585 377	44.3	2	2	7
Kansas -----	1 056 583	351	873 198	133	183 385	863 865	22.3	2	3	2
Kentucky -----	1 113 189	395	846 399	213	266 790	873 566	27.4	3	4	1
Louisiana -----	1 069 503	367	836 834	149	232 669	988 439	8.2	4	5	1
Maine -----	295 036	121	197 637	67	97 399	404 649	-27.1	5	8	2
Maryland -----	2 448 524	768	1 942 649	298	505 875	2 531 411	-3.3	2	2	1
Massachusetts -----	2 251 461	730	1 958 798	176	292 663	2 801 696	-19.6	2	2	4
Michigan -----	2 362 411	808	2 164 024	174	198 387	2 333 932	1.2	2	2	2
Minnesota -----	1 985 004	559	1 863 856	137	121 148	1 566 101	26.7	2	2	4
Mississippi -----	539 184	246	398 028	116	141 156	491 615	9.7	4	5	1
Missouri -----	1 656 416	776	1 359 265	245	297 151	1 902 880	-13.0	3	3	7
Montana -----	165 726	109	147 558	52	18 168	156 781	5.7	7	8	6
Nebraska -----	478 071	311	368 340	91	109 731	502 086	-4.8	5	6	11
Nevada -----	916 075	226	564 088	121	351 987	541 908	69.0	3	4	1
New Hampshire -----	317 892	89	221 187	95	96 704	514 845	-38.3	5	7	5
New Jersey -----	2 770 559	856	2 250 018	312	520 542	3 110 290	-10.9	1	2	1
New Mexico -----	603 173	233	485 243	87	117 929	539 415	11.8	3	4	2
New York -----	5 951 679	1 876	5 280 309	308	671 370	5 886 804	1.1	1	1	2
North Carolina -----	2 529 560	745	1 865 534	260	664 026	2 218 036	14.0	2	2	(Z)
North Dakota -----	150 909	126	139 872	59	11 037	150 516	.3	4	4	9
Ohio -----	3 372 717	1 208	3 045 608	224	327 109	3 167 271	6.5	2	2	2
Oklahoma -----	732 603	367	614 772	133	117 831	697 215	5.1	3	4	3
Oregon -----	900 877	401	781 544	107	119 333	711 557	26.6	3	3	4
Pennsylvania -----	4 522 643	1 203	3 951 491	315	571 152	3 601 648	25.6	1	1	2
Rhode Island -----	429 437	134	390 086	65	39 350	302 036	42.2	4	4	5
South Carolina -----	1 155 316	367	820 138	214	335 178	990 938	16.6	2	3	1
South Dakota -----	(D)	144	(D)	56	66 770	170 296	(D)	(D)	7	3
Tennessee -----	1 515 766	533	1 292 488	182	223 278	1 981 291	-23.5	2	2	4
Texas -----	6 350 832	1 688	5 639 116	221	711 715	6 035 367	5.2	2	2	1
Utah -----	692 520	215	637 915	70	54 605	492 322	40.7	5	5	6
Vermont -----	214 507	122	137 450	48	77 057	169 655	26.4	5	8	2
Virginia -----	2 732 532	684	1 892 192	435	840 340	3 012 181	-9.3	1	2	1
Washington -----	2 648 107	844	2 225 945	186	422 162	2 054 008	28.9	2	2	1
West Virginia -----	(D)	194	(D)	128	164 057	244 756	(D)	(D)	5	2
Wisconsin -----	(D)	503	(D)	189	119 855	1 091 804	(D)	(D)	2	9
Wyoming -----	(D)	85	(D)	79	51 894	137 432	(D)	(D)	12	6

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	95 689 214	91 698 973	(Z)	(Z)
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS				
General building contractor	74 544 519	85 540 047	(Z)	(Z)
General building contractor, remodeling ¹	16 611 456	(NA)	1	(NA)
Operative builder	180 903	220 173	4	6
Other construction activities	2 062 984	2 629 668	1	3
OTHER BUSINESS ACTIVITIES				
Architectural services	81 683	(NA)	9	(NA)
Building construction on land owned by you, for rent or lease	192 511	187 438	4	4
Construction management services	983 561	(NA)	1	(NA)
Other business activities	522 189	1 745 012	2	(NA)
Kind of business activity, n.s.k.	509 411	1 376 635	5	2

¹In 1987, this item, for the most part, represented the value of residential remodeling general contractor work and was included in "other construction activities." For 1992, it was shown separately and represents the value of both residential and nonresidential remodeling general contractor work.

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	13.7	15.6	1
Number of construction workers	9.6	11.7	1
Number of all other employees	4.1	3.9	1
Payroll, all employees	396.9	377.9	1
Payroll, construction workers	241.5	247.5	1
Payroll, other employees	155.4	130.4	1
Dollar value of business done	3 217.6	2 926.2	1
Value of construction work	3 160.3	2 865.4	1
Cost of materials, components, supplies, and fuels	634.2	529.3	1
Construction work subcontracted to others	1 851.9	1 604.6	1
Rental cost for machinery, equipment, and buildings	26.4	23.0	1
Capital expenditures, other than land	18.3	18.2	2
Gross book value of depreciable assets	174.1	138.7	1
AVERAGE PER EMPLOYEE			
Payroll, all employees	29.0	24.2	(Z)
Dollar value of business done	235.0	187.7	(Z)
Value added††	53.4	50.8	(Z)
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers	25.1	21.1	(Z)
Value of construction work	328.7	244.8	(Z)
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees	38.1	33.6	(Z)
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees .....	.126	.132	(Z)
Cost of materials, components, supplies, and fuels .....	.201	.185	(Z)
Cost of construction work subcontracted out to others .....	.586	.560	(Z)
Value of construction work subcontracted in from others .....	.031	.034	2
Rental cost for machinery, equipment, and buildings .....	.008	.008	1

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	13.7	29.0	328.7	.126	.201	.586	.031	.008
Alabama -----	23.2	24.8	258.8	.128	.257	.571	.019	.009
Alaska -----	11.8	43.7	324.7	.185	.227	.423	.030	.010
Arizona -----	17.2	31.1	542.1	.090	.108	.646	.018	.008
Arkansas -----	13.2	21.0	261.0	.105	.243	.531	(S)	.014
California -----	11.1	35.3	452.1	.118	.149	.627	.023	.009
Colorado -----	17.4	30.0	411.7	.102	.202	.576	.020	.007
Connecticut -----	10.7	36.4	462.1	.122	.184	.643	.037	.008
Delaware -----	10.7	27.3	352.9	.115	.202	.541	.028	.007
District of Columbia -----	37.5	32.0	340.0	.132	.125	.688	.043	.005
Florida -----	11.0	24.6	303.6	.120	.208	.587	.028	.009
Georgia -----	17.8	25.1	297.8	.120	.229	.576	.017	.014
Hawaii -----	17.1	37.9	304.8	.173	.271	.469	.021	.008
Idaho -----	15.5	24.4	229.0	.147	.263	.537	.024	.007
Illinois -----	12.2	34.0	400.3	.124	.166	.633	.038	.006
Indiana -----	20.1	28.3	207.9	.178	.220	.465	.050	.006
Iowa -----	14.4	25.3	239.9	.137	.247	.517	.017	.006
Kansas -----	14.3	24.3	335.2	.099	.240	.514	.075	.014
Kentucky -----	15.2	23.6	214.7	.143	.256	.516	.033	.009
Louisiana -----	14.4	20.4	212.3	.124	.262	.503	.023	.006
Maine -----	8.5	25.2	284.1	.123	.221	.564	*.039	.008
Maryland -----	16.6	31.2	353.1	.131	.180	.588	.023	.006
Massachusetts -----	10.7	32.6	464.5	.111	.190	.637	.031	.006
Michigan -----	12.6	31.0	374.1	.123	.238	.610	.041	.006
Minnesota -----	13.2	32.2	396.2	.115	.152	.609	.021	.005
Mississippi -----	15.7	19.3	190.6	.134	.293	.485	.049	.007
Missouri -----	10.7	26.8	302.0	.126	.187	.617	.052	.007
Montana -----	11.0	21.6	197.1	.141	.343	.518	*.021	.008
Nebraska -----	8.9	20.2	193.0	.141	.254	.517	.029	.009
Nevada -----	9.8	30.7	376.3	.113	.158	.620	.043	.011
New Hampshire -----	13.6	30.9	316.3	.145	.182	.623	.060	.008
New Jersey -----	11.6	34.4	360.8	.139	.206	.498	.038	.009
New Mexico -----	16.0	26.8	224.7	.158	.220	.466	.031	.009
New York -----	12.0	35.0	371.4	.142	.195	.587	.046	.007
North Carolina -----	17.5	23.8	238.0	.135	.238	.561	.015	.009
North Dakota -----	9.6	20.2	175.4	.141	.303	.459	*.020	.006
Ohio -----	13.2	28.4	322.1	.133	.218	.587	.065	.007
Oklahoma -----	13.7	19.3	233.1	.114	.240	.572	.009	.013
Oregon -----	10.3	30.2	308.8	.136	.192	.594	.024	.015
Pennsylvania -----	16.4	31.5	324.8	.135	.192	.596	.035	.008
Rhode Island -----	14.5	26.0	347.0	.111	.211	.473	.037	.006
South Carolina -----	15.2	23.4	222.0	.142	.257	.514	.023	.009
South Dakota -----	10.6	20.9	217.5	.125	.273	.433	.013	.012
Tennessee -----	19.1	23.9	281.6	.119	.186	.640	.021	.008
Texas -----	15.1	25.4	353.4	.103	.232	.599	.026	.011
Utah -----	17.8	25.5	330.1	.106	.170	.613	.011	.007
Vermont -----	14.6	26.5	280.5	.131	.223	.542	.005	.010
Virginia -----	15.0	27.1	301.0	.128	.220	.618	.026	.006
Washington -----	11.9	31.4	328.5	.132	.216	.592	.035	.009
West Virginia -----	10.5	22.5	138.1	.206	.233	.395	.025	.012
Wisconsin -----	17.8	32.7	253.5	.175	.236	.508	.046	.006
Wyoming -----	7.4	20.0	198.9	.130	.226	.570	(S)	.012

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
- **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
- **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- **Outdoor swimming pools.** Includes wading pools and reflecting pools.
- **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
- **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
- **Fencing.** Includes all types of fencing.
- **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
- **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
- **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- **Harbor and port facilities.** Includes docks, piers, and wharves.
- **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
- **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
- **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
- **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
- **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

Nonbuilding construction:

- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

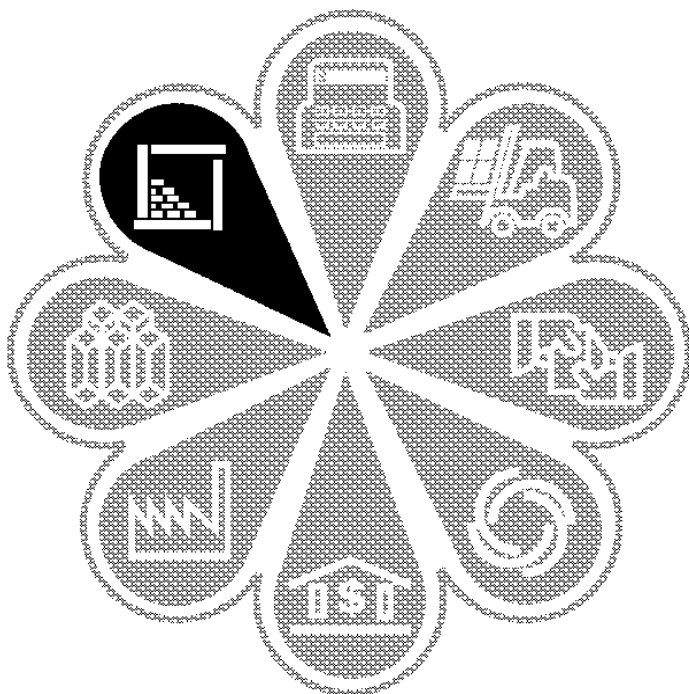
Census of Construction Industries

CC92-I-6

INDUSTRY SERIES

Highway and Street Construction Contractors, Except Elevated Highways

Industry 1611



1992

Census of

Construction Industries

CC92-I-6

INDUSTRY SERIES

Highway and Street

Construction Contractors,

Except Elevated Highways

Industry 1611

Issued June 1995



U.S. Department of Commerce

Ronald H. Brown, Secretary

David J. Barram, Deputy Secretary

Economics and Statistics Administration

Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS

Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Highway and Street Construction Contractors, Except Elevated Highways

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appears as part of the number of each page]

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Summary of Findings

Establishments classified in this industry are primarily engaged in the construction of highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$36.6 billion in total dollar value of business. Of this amount, \$35.3 billion were for the value of construction work. These establishments paid out \$12.3 billion for materials, components, and supplies and \$7.5 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$1.2 billion. Value added for 1992 was \$15.7 billion.

There were 10,090 establishments with total employment averaging 257,356 during the year. Total payroll for 1992 was \$7.4 billion.

Larger establishments with 20 employees or more, while representing only 29 percent of the total number of

employer establishments in this industry, accounted for 86 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

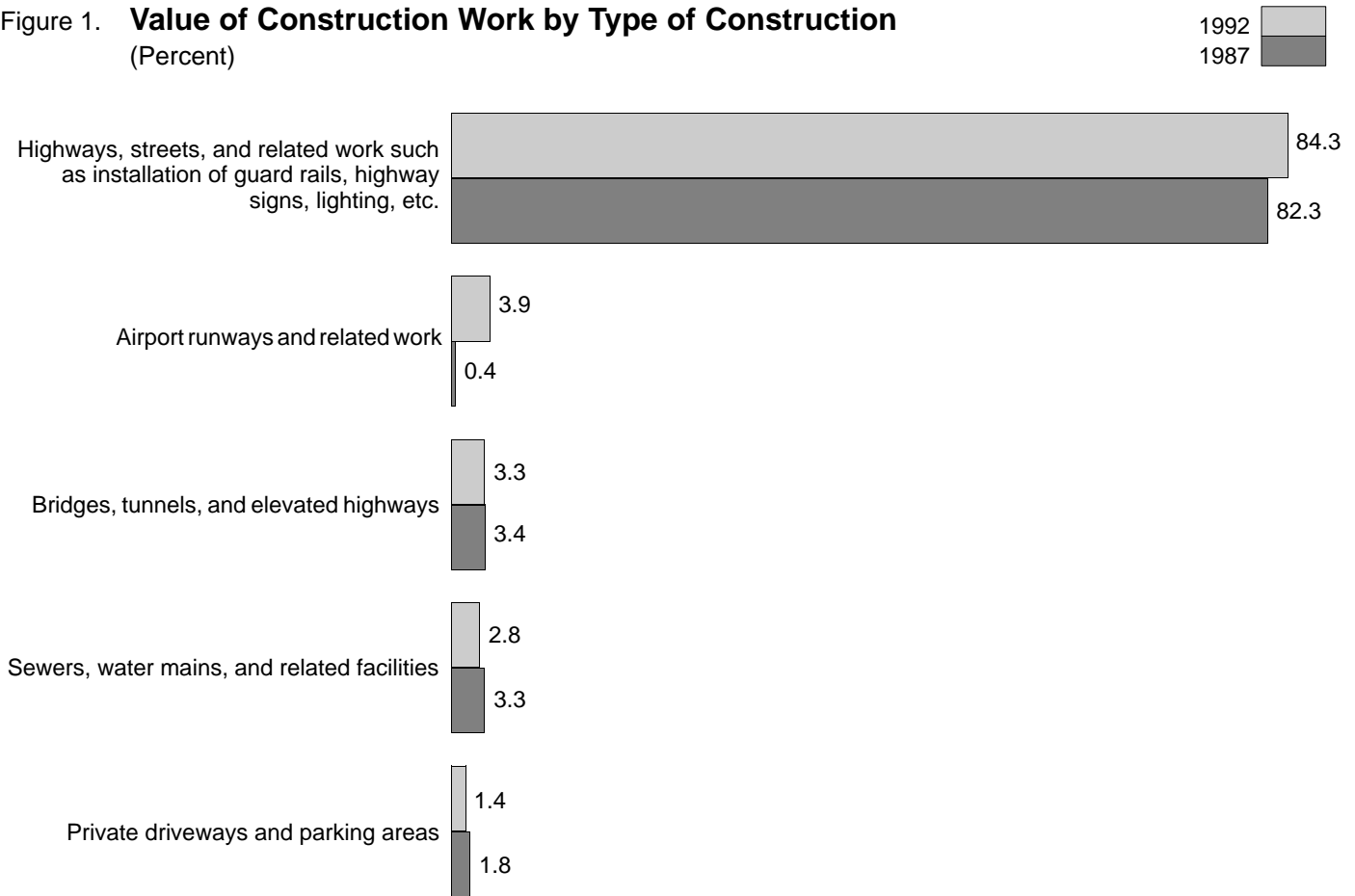


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

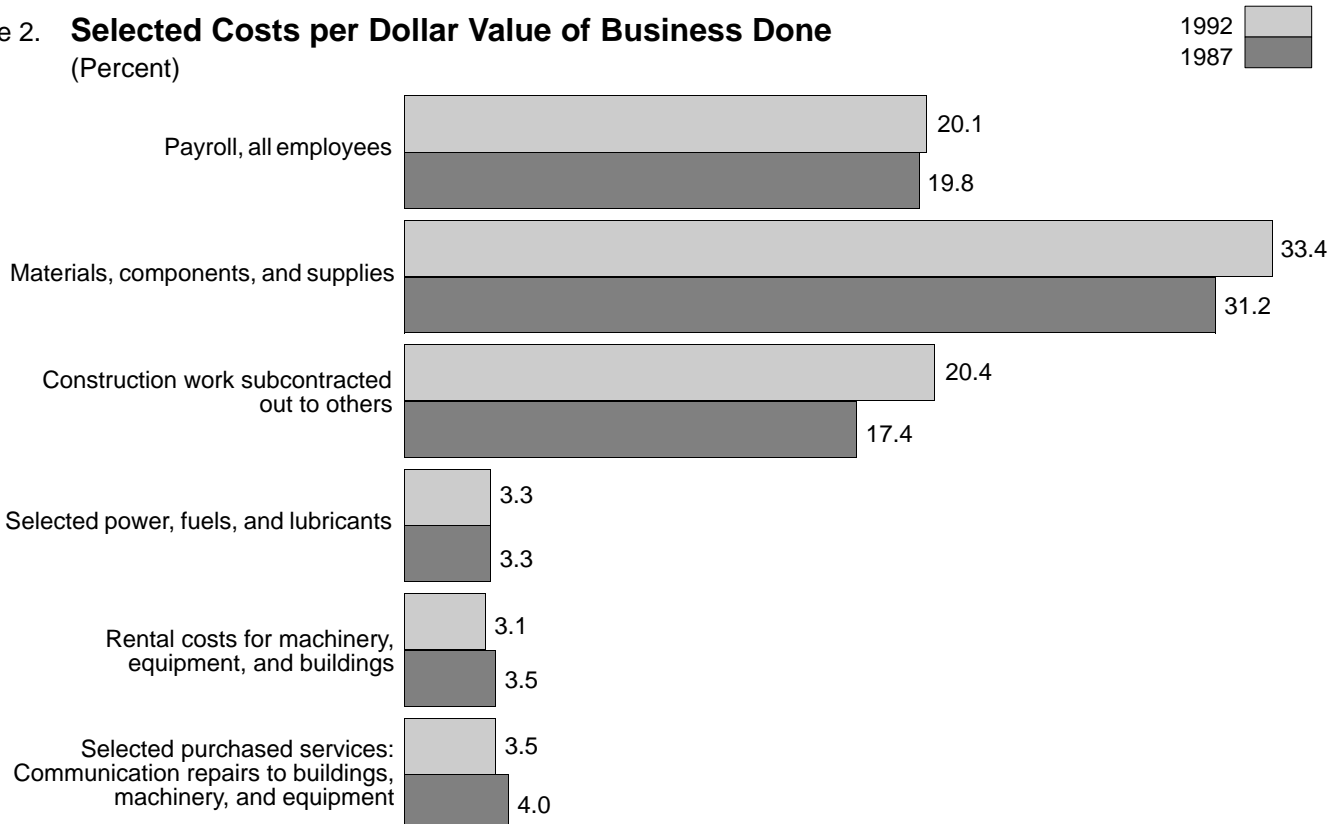


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	10 090	257 356	211 161	7 357 719	5 456 665	35 331 607	27 862 971	15 710 659	13 466 539
Alabama -----	149	4 268	3 644	87 067	63 395	441 340	357 941	221 984	159 968
Alaska -----	113	1 722	1 457	79 819	66 563	304 910	255 155	124 784	135 163
Arizona -----	148	4 407	3 506	122 025	84 767	641 021	498 799	283 205	222 005
Arkansas -----	109	2 377	1 999	49 708	37 736	309 543	258 050	138 037	131 545
California -----	896	15 532	11 925	578 104	399 164	2 728 254	2 081 139	1 156 590	979 020
Colorado -----	143	4 746	3 767	140 667	100 755	750 785	591 121	369 867	242 846
Connecticut -----	163	2 985	2 375	103 029	75 596	470 350	380 721	185 168	200 633
Delaware -----	30	1 398	1 083	40 362	26 273	193 292	160 517	92 853	(D)
District of Columbia -----	10	721	590	26 298	17 299	98 294	75 782	39 438	36 344
Florida -----	480	14 687	12 010	337 493	243 439	1 873 875	1 357 683	792 949	626 210
Georgia -----	264	8 445	7 116	169 464	127 661	984 560	740 535	399 994	365 730
Hawaii -----	43	3 112	2 452	139 030	96 974	647 353	487 203	286 912	241 673
Idaho -----	76	2 016	1 651	49 216	38 248	222 451	180 937	133 212	63 703
Illinois -----	437	10 569	8 553	383 089	279 735	1 702 714	1 359 777	826 038	596 052
Indiana -----	197	5 433	4 396	176 822	133 438	764 057	605 555	296 151	329 793
Iowa -----	158	5 031	4 301	130 529	104 682	752 552	579 143	295 600	311 987
Kansas -----	135	4 244	3 484	102 295	74 510	486 382	375 575	216 885	203 048
Kentucky -----	208	4 973	4 210	125 218	93 581	681 319	529 503	258 888	301 448
Louisiana -----	132	6 643	5 619	128 191	96 432	671 009	567 993	247 199	336 053
Maine -----	70	2 691	2 168	72 449	55 427	234 715	202 932	142 760	79 267
Maryland -----	180	6 920	5 455	192 089	126 721	789 534	605 359	390 528	237 599
Massachusetts -----	230	2 858	2 285	91 552	70 332	415 591	336 260	214 453	134 554
Michigan -----	309	6 279	5 168	196 185	157 227	971 986	770 751	429 296	368 623
Minnesota -----	274	6 480	5 418	235 421	182 840	1 114 373	876 457	550 922	389 903
Mississippi -----	137	3 757	3 102	79 053	57 313	422 708	333 542	145 601	202 655
Missouri -----	188	5 059	4 153	152 386	117 220	778 504	577 631	313 863	292 881
Montana -----	90	1 603	1 359	49 428	38 788	223 102	181 036	124 535	65 957
Nebraska -----	69	2 237	1 888	58 333	43 602	316 362	246 376	123 144	123 860
Nevada -----	72	1 641	1 353	55 930	44 651	232 688	202 418	128 257	89 509
New Hampshire -----	69	1 270	1 007	40 732	29 622	155 132	133 850	84 442	(D)
New Jersey -----	335	5 671	4 563	209 177	158 444	862 976	696 549	430 226	284 657
New Mexico -----	51	2 160	1 885	48 647	33 943	214 925	178 548	101 537	78 701
New York -----	536	10 744	8 563	377 271	281 816	1 650 334	1 374 730	862 025	558 087
North Carolina -----	324	9 090	7 553	202 792	146 754	1 013 997	788 777	417 695	424 630
North Dakota -----	43	1 154	1 022	30 651	26 297	153 581	123 121	82 621	43 389
Ohio -----	375	10 672	8 699	355 290	261 707	1 750 712	1 391 058	610 619	821 258
Oklahoma -----	151	3 013	2 518	69 503	50 930	380 351	322 154	142 057	185 350
Oregon -----	244	2 652	2 167	74 389	56 539	342 873	281 363	158 185	140 286
Pennsylvania -----	418	10 929	9 014	327 089	251 288	1 504 733	1 213 437	733 947	549 884
Rhode Island -----	29	826	644	27 075	20 213	104 286	86 445	58 181	(D)
South Carolina -----	121	3 169	2 590	66 235	47 672	369 917	272 789	134 997	144 740
South Dakota -----	106	1 532	1 330	34 355	27 051	175 209	146 056	92 626	53 915
Tennessee -----	191	5 965	5 042	145 517	108 095	795 924	620 940	315 579	325 920
Texas -----	576	20 232	17 249	442 990	332 543	2 227 024	1 790 446	910 065	930 340
Utah -----	75	2 514	2 058	67 241	50 953	299 262	224 831	141 384	118 421
Vermont -----	23	270	217	7 331	4 822	31 364	27 268	11 738	16 932
Virginia -----	358	8 856	7 209	205 941	149 691	905 678	722 444	412 764	341 258
Washington -----	259	5 756	4 629	198 551	147 174	861 134	703 861	457 095	314 290
West Virginia -----	78	2 275	1 871	65 144	49 251	263 172	211 476	138 699	104 710
Wisconsin -----	152	4 548	3 803	179 156	142 956	914 358	667 240	419 075	319 938
Wyoming -----	66	1 222	1 041	31 392	24 533	131 040	109 695	65 992	45 628

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
7 468 636	7 334 384	1 126 315	1 281 549	13 727 083	284 380	34 161 427	17 119 634	(Z)	(Z)	1	U.S.
83 399	101 468	8 774	15 274	219 531	3 587	371 534	143 253	3	2	5	AL
49 755	35 533	11 498	18 089	172 845	1 803	349 103	216 423	6	4	4	AK
142 222	112 819	28 556	14 021	155 220	5 632	745 440	356 455	3	2	6	AZ
51 492	52 644	6 234	13 297	156 407	2 235	224 796	99 780	6	6	9	AR
647 115	657 107	151 216	53 078	796 443	18 748	2 975 885	1 591 856	2	1	9	CA
159 663	108 887	29 939	37 962	256 278	5 704	649 841	334 029	3	3	13	CO
89 629	81 453	19 514	18 211	181 806	4 047	528 259	285 564	3	2	8	CT
32 775	39 994	9 275	9 226	92 091	1 666	178 818	70 430	3	2	5	DE
22 512	37 425	4 120	1 892	20 150	917	81 401	41 299	4	3	1	DC
516 192	413 282	62 257	71 220	719 990	17 238	1 881 250	923 701	2	1	4	FL
244 025	152 461	17 064	30 489	368 391	8 121	913 408	417 591	2	2	4	GA
160 150	107 779	17 625	16 412	137 916	1 110	166 074	83 007	2	1	3	HI
41 514	38 785	8 092	16 675	147 690	1 060	107 029	60 554	4	4	6	ID
342 937	340 277	68 700	51 673	630 121	11 351	1 543 635	798 258	2	1	4	IL
158 502	159 992	22 870	38 978	226 577	4 973	569 333	286 203	3	2	2	IN
173 409	122 042	11 818	30 884	338 597	3 798	475 127	215 036	3	2	10	IA
110 807	112 293	11 919	34 545	269 217	4 497	603 805	284 318	3	3	2	KS
151 816	115 644	18 058	33 811	309 898	4 455	568 250	270 106	3	2	5	KY
103 016	89 397	16 685	31 565	350 606	7 051	737 252	313 860	3	3	8	LA
31 783	59 004	6 988	10 532	121 212	2 152	192 991	106 208	3	4	10	ME
184 175	173 233	31 783	22 657	375 810	7 755	914 366	471 093	2	2	2	MD
79 331	88 514	9 812	12 370	171 920	3 991	508 928	262 652	4	2	7	MA
201 236	219 077	29 901	33 372	412 711	5 636	859 953	423 737	3	2	4	MI
237 916	235 028	38 908	43 402	394 975	7 869	1 224 946	631 481	4	1	4	MN
89 166	129 018	13 454	13 881	145 096	3 369	298 284	153 945	4	5	5	MS
200 873	144 806	19 910	36 260	292 171	6 123	769 810	396 673	3	3	7	MO
42 065	46 724	8 874	20 079	116 238	1 616	199 781	135 273	5	4	11	MT
69 987	63 512	7 091	11 625	111 185	2 032	208 193	86 932	6	8	13	NE
30 270	51 781	8 980	9 371	116 561	1 980	301 240	171 391	5	3	20	NV
21 282	35 615	8 252	5 034	82 880	2 222	211 118	115 444	5	5	7	NH
166 427	192 844	28 662	23 568	285 389	7 016	838 067	469 724	2	2	3	NJ
36 377	19 469	5 275	10 484	128 640	2 744	291 476	137 171	3	2	9	NM
275 604	297 721	47 639	36 488	509 890	14 372	1 689 221	907 846	2	3	4	NY
225 220	269 091	26 336	42 067	528 383	8 567	837 893	375 077	2	3	8	NC
30 460	21 293	7 212	6 659	82 243	1 604	176 959	92 859	5	4	7	ND
359 654	364 139	34 143	56 368	523 522	9 488	1 285 954	601 745	1	1	4	OH
58 198	80 377	11 093	14 428	132 258	3 048	323 558	164 600	3	2	12	OK
61 510	73 161	15 652	9 074	102 421	2 775	352 965	199 976	4	3	14	OR
291 296	296 866	42 620	46 448	577 964	12 701	1 654 971	882 588	2	2	4	PA
17 840	13 746	4 905	3 506	68 874	764	102 715	66 265	6	3	11	RI
97 128	79 781	7 769	16 440	136 191	4 786	481 091	195 099	4	3	4	SC
29 153	43 385	5 000	10 775	87 289	1 160	117 959	79 109	8	6	17	SD
174 984	154 802	17 592	35 425	332 390	6 674	748 872	316 690	2	1	5	TN
436 577	431 170	69 526	81 505	755 544	31 776	3 069 721	1 404 933	2	1	4	TX
74 431	61 151	10 802	17 357	175 181	2 076	245 015	140 650	4	2	11	UT
4 097	11 508	467	1 404	27 745	308	32 411	17 772	9	12	14	VT
183 234	232 034	22 245	23 962	455 888	9 218	909 538	459 291	3	2	6	VA
157 273	194 780	17 562	37 504	313 786	4 599	603 218	339 452	3	2	3	WA
51 696	49 196	7 953	10 481	151 129	1 793	209 236	121 143	3	3	2	WV
247 118	306 308	29 953	34 240	379 937	4 381	662 689	314 077	2	1	5	WI
21 346	15 969	5 738	7 477	81 885	1 768	168 028	86 992	8	4	18	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	10 090	10 986	10 111	11 748	1	1	1	2
Proprietors and working partners	2 130	1 637	2 077	4 341	4	6	4	4
All employees**	257 356	284 380	212 610	267 917	(Z)	(Z)	(Z)	(Z)
Construction workers:								
March	151 138	173 163	123 961	158 199	(Z)	(Z)	(Z)	(Z)
May	231 255	254 289	189 782	250 034	(Z)	(Z)	(Z)	(Z)
August	249 673	282 993	219 168	280 744	(Z)	(Z)	(Z)	(Z)
November	212 577	246 032	184 490	241 713	(Z)	1	(Z)	(Z)
Average	211 161	239 111	180 303	232 810	(Z)	(Z)	(Z)	(Z)
Other employees:								
March	45 552	43 982	32 162	32 875	1	1	1	1
May	46 087	44 909	(NA)	(NA)	1	1	(NA)	(NA)
August	47 141	46 761	(NA)	(NA)	1	1	(NA)	(NA)
November	46 000	45 410	(NA)	(NA)	1	1	(NA)	(NA)
Average	46 195	45 268	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	7 357 719	7 041 109	3 989 211	3 595 809	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	5 456 665	5 397 159	3 138 381	2 927 185	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	1 901 055	1 643 949	850 829	668 624	(Z)	(Z)	(Z)	(Z)
First-quarter payroll, all employees	1 197 834	1 216 316	664 357	546 790	(Z)	(Z)	(Z)	(Z)
Fringe benefits, all employees	2 140 510	1 708 196	770 436	722 131	(Z)	(Z)	(Z)	(Z)
Legally required expenditures	1 281 011	1 083 019	567 356	411 917	1	(Z)	(Z)	(Z)
Voluntary expenditures	859 499	625 177	203 079	310 214	1	(Z)	(Z)	(Z)
Dollar value of business done	36 645 834	35 528 035	19 035 172	15 620 916	(Z)	(Z)	(Z)	(Z)
Value of construction work	35 331 607	34 161 427	18 157 364	15 021 207	(Z)	(Z)	(Z)	(Z)
Value of construction work subcontracted in from others	7 334 384	7 065 089	2 950 376	2 935 619	1	1	1	(Z)
Other business receipts	1 314 227	1 366 608	877 808	599 709	1	1	(Z)	(Z)
Net value of construction work†	27 862 971	27 983 839	14 987 471	12 546 357	(Z)	(Z)	(Z)	(Z)
Value added††	15 710 659	17 119 634	8 633 319	7 641 218	(Z)	(Z)	(Z)	(Z)
Selected costs	20 935 175	18 408 401	10 401 853	7 979 699	(Z)	(Z)	(Z)	(Z)
Materials, components, and supplies	12 255 699	11 067 102	6 304 529	4 917 779	(Z)	(Z)	(Z)	(Z)
Construction work subcontracted out to others	7 468 636	6 177 587	3 169 893	2 474 851	(Z)	1	(Z)	(Z)
Selected power, fuels, and lubricants	1 210 841	1 163 712	927 431	587 069	(Z)	(Z)	(Z)	(Z)
Electricity	124 013	103 582	82 831	46 713	1	1	1	1
Natural and manufactured gas	97 409	76 196	69 168	35 036	1	1	1	(Z)
Gasoline and diesel fuel	866 660	886 197	709 441	438 500	1	(Z)	(Z)	(Z)
On highway use	380 351	397 964	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	486 309	488 233	(NA)	(NA)	1	1	(NA)	(NA)
Other, including lubricating oils and greases	122 759	97 736	65 990	66 867	1	1	1	(NA)
Rental cost for machinery, equipment, and buildings	1 126 315	1 258 625	621 502	543 662	1	1	1	(Z)
For machinery and equipment	1 027 376	1 178 028	582 027	519 027	1	1	1	(Z)
For buildings	98 939	80 597	39 475	24 635	2	2	2	1
Selected purchased services	1 265 448	1 432 867	873 430	764 247	1	1	(Z)	(Z)
Communication services	117 162	88 693	56 235	39 975	1	1	1	1
Repairs to buildings and other structures	30 941	34 023	23 825	14 918	3	5	2	1
Repairs to machinery and equipment	1 117 346	1 310 151	793 369	709 354	1	1	(Z)	(Z)
Ownership of construction projects:								
Value of construction work	35 331 607	34 161 427	18 157 364	15 021 207	(Z)	(Z)	(Z)	(Z)
Government owned	26 731 222	24 112 623	12 897 206	10 326 924	1	1	(Z)	(Z)
Federal	3 499 084	4 688 600	(NA)	(NA)	1	1	(NA)	(NA)
State and local	23 232 139	19 424 023	(NA)	(NA)	1	1	(NA)	(NA)
Privately owned	8 600 385	10 048 803	5 260 158	4 694 283	1	1	1	(Z)

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	13 164 567	10 241 436	1	1
Capital expenditures, other than land -----	1 281 549	1 353 924	1	1
New -----	912 442	1 070 253	1	1
Used -----	369 106	283 670	2	2
Retirements and disposition of depreciable assets -----	719 033	539 596	2	6
End-of-year gross book value of depreciable assets -----	13 727 083	11 055 764	1	1
Depreciation charges during year -----	1 263 009	1 166 397	1	1
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	851 124	833 503	2	2
Capital expenditures, other than land -----	71 754	115 374	4	2
New buildings and other structures -----	61 486	100 775	4	2
Used buildings and other structures -----	10 269	14 598	10	10
Retirements and disposition of depreciable assets -----	25 655	15 201	10	8
End-of-year gross book value of depreciable assets -----	897 223	933 676	2	2
Depreciation charges during year -----	70 996	69 506	2	2
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	12 313 443	9 407 933	1	1
Capital expenditures, other than land -----	1 209 794	1 238 550	1	1
New machinery and equipment, including automobiles and trucks -----	850 957	969 478	1	1
New automobiles and trucks, intended primarily for highway use -----	214 350	261 602	2	2
Used machinery and equipment, including automobiles and trucks -----	358 837	269 072	2	2
Retirements and disposition of depreciable assets -----	693 377	524 395	2	6
End-of-year gross book value of depreciable assets -----	12 829 860	10 122 087	1	1
Depreciation charges during year -----	1 192 013	1 096 890	1	1

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	10 090	1
Value of construction work	35 331 607	(Z)
Establishments with inventories:		
Number	3 021	2
Value of construction work	17 726 394	(Z)
Inventories ¹ :		
End of 1992, materials and supplies	360 526	1
End of 1991, materials and supplies	347 640	1
Establishments with no inventories:		
Number	3 863	2
Value of construction work	12 626 335	1
Establishments not reporting:		
Number	3 206	2
Value of construction work	4 978 878	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	10 090	(S)	1 999	1 768	1 705	725	400	101	14	4
All employees** -----	257 356	7 299	13 171	23 958	53 223	49 934	59 446	34 154	9 957	6 213
Payroll, all employees -----	7 357 719	131 907	284 531	627 188	1 501 429	1 473 015	1 839 625	1 059 594	322 190	118 240
Dollar value of business done -----	36 645 834	718 555	1 382 293	2 973 774	7 161 223	7 356 397	9 554 888	5 242 036	1 663 828	592 840
Value of construction work -----	35 331 607	711 820	1 362 783	2 914 985	6 929 669	7 099 422	9 103 672	5 049 460	1 571 577	588 220
Net value of construction work† -----	27 862 971	642 414	1 182 408	2 469 652	5 648 493	5 628 429	7 001 587	3 669 890	1 173 224	446 875
Value added†† -----	15 710 659	370 132	702 597	1 461 986	3 172 047	3 125 381	3 941 824	2 207 073	519 394	210 225
Cost of materials, components, supplies, and fuels -----	13 466 539	279 017	499 322	1 066 455	2 708 000	2 760 023	3 510 979	1 655 393	746 081	241 270
Cost of construction work subcontracted out to others -----	7 468 636	69 406	180 375	445 333	1 281 176	1 470 993	2 102 085	1 379 570	398 353	141 345
Rental cost for machinery, equipment, and buildings -----	1 126 315	29 054	43 818	99 644	212 195	219 917	312 939	159 356	32 513	16 880
Capital expenditures, other than land -----	1 281 549	(S)	44 002	129 284	227 568	260 442	347 135	177 835	42 578	19 973
End-of-year gross book value of depreciable assets -----	13 727 083	299 961	591 175	1 210 881	2 593 553	2 692 723	3 697 798	1 816 153	568 340	256 499
1987										
All employees** -----	284 380	7 350	14 478	28 050	59 272	52 371	65 494	32 984	15 278	9 101
Value of construction work -----	34 161 427	750 092	1 417 247	2 920 330	6 679 445	6 687 998	8 793 694	4 264 594	2 648 025	(D)
Value added†† -----	17 119 634	405 181	760 254	1 547 169	3 513 617	3 337 470	4 197 614	2 105 676	780 760	471 892
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	(Z)	4	5	3	1	1	(Z)	(Z)	(Z)	(Z)
Net value of construction work† -----	(Z)	6	5	3	1	(Z)	(Z)	(Z)	(Z)	(Z)
Capital expenditures, other than land -----	1	(S)	12	7	1	(Z)	(Z)	(Z)	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	10 090	(S)	(S)	(S)	1 575	1 571	1 310	1 723	1 040	797	885
All employees** -----	257 356	(S)	(S)	(S)	4 855	8 115	12 584	27 836	30 517	40 451	131 263
Payroll, all employees -----	7 357 719	(S)	(S)	(S)	65 958	152 136	241 357	697 917	824 443	1 156 372	4 203 026
Dollar value of business done -----	36 645 834	(S)	(S)	(S)	264 152	568 422	924 281	2 758 092	3 705 964	5 638 223	22 723 714
Value of construction work -----	35 331 607	(S)	(S)	(S)	260 190	562 565	909 828	2 695 152	3 597 794	5 483 068	21 760 771
Net value of construction work† -----	27 862 971	(S)	(S)	(S)	245 304	511 784	827 640	2 375 435	3 026 813	4 463 571	16 354 453
Value added†† -----	15 710 659	(S)	(S)	(S)	143 048	310 771	507 563	1 478 664	1 752 513	2 433 713	9 048 202
Cost of materials, components, supplies, and fuels -----	13 466 539	(S)	(S)	(S)	106 218	206 869	334 529	959 710	1 382 470	2 185 013	8 269 194
Cost of construction work subcontracted out to others -----	7 468 636	(S)	(S)	(S)	14 886	50 781	82 188	319 717	570 981	1 019 497	5 406 318
Rental cost for machinery, equipment, and buildings -----	1 126 315	(S)	(S)	(S)	11 322	18 490	34 703	86 382	126 959	168 518	677 637
Capital expenditures, other than land -----	1 281 549	(S)	(S)	(S)	(S)	22 312	44 761	105 493	127 917	212 678	752 726
End-of-year gross book value of depreciable assets -----	13 727 083	(S)	(S)	(S)	146 118	238 306	433 650	1 188 353	1 506 648	2 117 217	8 065 514
1987											
All employees** -----	284 380	(S)	(S)	(S)	4 430	10 235	16 110	34 213	35 192	43 497	138 794
Value of construction work -----	34 161 427	(S)	(S)	(S)	219 929	637 475	1 170 900	3 154 534	3 885 084	5 312 512	19 718 930
Value added†† -----	17 119 634	(S)	(S)	(S)	139 383	361 446	658 332	1 746 012	2 094 871	2 712 861	9 368 124
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	(S)	(S)	(S)	6	6	5	3	1	(Z)	(Z)
Net value of construction work† -----	(Z)	(S)	(S)	(S)	6	5	5	3	2	1	(Z)
Capital expenditures, other than land -----	1	(S)	(S)	(S)	(S)	15	11	8	3	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	35 331 607	17 834 661	10 724 920	6 759 674	(Z)	(Z)	(Z)	1
Building construction	475 842	379 161	71 006	25 675	3	3	7	6
Nonbuilding construction	34 843 413	17 455 500	10 653 914	6 733 999	(Z)	(Z)	(Z)	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	29 793 619	14 359 566	9 311 136	6 122 917	(Z)	(Z)	1	1
Airport runways and related work	1 368 143	781 814	412 344	173 985	1	1	1	2
Private driveways and parking areas	507 930	246 067	152 648	109 215	2	1	5	4
Recreational facilities	184 789	145 417	24 096	15 276	3	3	5	6
Bridges, tunnels, and elevated highways	1 167 115	704 994	325 627	136 494	1	2	3	5
Conservation and development construction	199 028	151 198	28 868	18 962	2	2	3	8
Sewers, water mains, and related facilities	1 006 553	705 539	227 594	73 420	1	1	2	2
Sewers, sewer lines, septic systems, and related facilities	662 477	462 082	148 696	51 699	1	1	2	3
Water mains and related facilities	344 076	243 457	78 898	21 721	2	2	3	4
Sewage treatment and water treatment plants	184 682	93 462	87 797	3 423	1	1	(Z)	16
Other nonbuilding construction	431 553	267 442	83 804	80 306	1	2	2	2
Construction work, n.s.k.	12 353	(NA)	(NA)	(NA)	26	(NA)	(NA)	(NA)
1987								
Value of construction work	34 161 427	19 135 235	9 176 728	5 315 634	(Z)	(Z)	1	1
Building construction	671 861	512 128	132 407	27 326	2	2	3	7
Nonbuilding construction	32 955 736	18 623 107	9 044 321	5 288 308	(Z)	(Z)	1	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	28 123 431	15 133 932	8 206 617	4 782 881	(Z)	(Z)	1	1
Airport runways and related work	123 809	43 347	55 522	24 940	4	11	(Z)	3
Private driveways and parking areas	607 665	383 184	121 837	102 643	2	3	3	2
Recreational facilities	183 363	133 287	25 719	24 356	4	4	5	18
Bridges, tunnels, and elevated highways	1 152 276	816 236	241 201	94 838	1	1	1	2
Conservation and development construction	177 865	145 849	21 111	10 904	4	4	4	16
Sewers, water mains, and related facilities	1 112 314	863 037	176 283	72 992	1	1	1	2
Sewers, sewer lines, septic systems, and related facilities	745 049	581 465	111 974	51 609	1	1	1	2
Water mains and related facilities	367 265	281 572	64 309	21 383	2	2	1	3
Sewage treatment and water treatment plants	110 885	92 276	14 827	3 781	2	2	6	6
Other nonbuilding construction	1 364 128	1 011 956	181 196	170 973	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	533 828	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
All establishments -----	10 090	257 356	7 357 719	35 331 607	29 863 743	27 862 971	15 710 659	7 468 636	(Z)	(Z)	(Z)
Establishments not specializing by type -----	121	4 758	149 953	735 830	(NA)	551 545	314 530	184 286	3	5	7
Establishments specializing 51 percent or more -----	9 969	252 598	7 207 767	34 595 777	29 863 743	27 311 426	15 396 129	7 284 351	(Z)	(Z)	(Z)
HIGHWAYS, STREETS, AND RELATED WORK SUCH AS INSTALLATION OF GUARD RAILS, HIGHWAY SIGNS, LIGHTING, ETC.											
All establishments specializing in type -----	9 705	248 924	7 077 401	33 814 238	29 304 067	26 773 066	15 113 447	7 041 172	(Z)	(Z)	(Z)
Establishments with —											
100 percent specialization -----	6 136	111 503	3 043 874	14 440 562	14 440 562	11 703 590	6 631 229	2 736 972	1	1	1
90 to 99 percent specialization -----	983	37 988	1 099 270	5 478 803	5 181 390	4 335 149	2 402 464	1 143 654	1	1	(Z)
80 to 89 percent specialization -----	698	29 984	858 032	4 182 033	3 492 595	3 251 726	1 886 531	930 307	1	1	1
70 to 79 percent specialization -----	617	22 489	693 681	3 108 301	2 282 744	2 410 349	1 486 877	697 952	1	1	1
60 to 69 percent specialization -----	687	29 461	835 560	3 988 689	2 517 236	3 085 584	1 585 760	903 105	1	1	1
51 to 59 percent specialization -----	583	17 499	546 984	2 615 850	1 389 540	1 986 667	1 120 585	629 183	2	1	1
AIRPORT RUNWAYS AND RELATED WORK											
All establishments specializing in type -----	96	3 410	125 249	759 710	538 418	518 262	270 257	241 448	2	1	(Z)
Establishments with —											
100 percent specialization -----	36	648	20 172	110 161	110 161	93 282	45 996	16 879	4	3	1
90 to 99 percent specialization -----	6	337	9 935	41 409	39 348	(D)	19 873	(D)	(Z)	(Z)	(D)
80 to 89 percent specialization -----	12	438	19 217	97 085	78 452	(D)	48 773	(D)	7	3	(D)
70 to 79 percent specialization -----	*13	199	*6 410	23 245	16 271	(D)	*13 390	(D)	24	27	(D)
60 to 69 percent specialization -----	21	1 479	56 951	431 779	262 710	241 188	121 813	190 592	3	1	(Z)
51 to 59 percent specialization -----	8	310	12 564	56 031	31 475	(D)	20 413	(D)	2	1	(D)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	10 090	211 161	151 138	231 255	249 673	212 577	1	(Z)	(Z)	(Z)	(Z)	(Z)
Alabama	149	3 644	3 146	3 768	3 965	3 698	9	3	3	3	3	3
Alaska	113	1 457	1 957	1 738	2 182	951	13	6	10	6	4	9
Arizona	148	3 506	2 841	3 792	3 835	3 555	12	3	3	3	4	3
Arkansas	109	1 999	1 643	2 104	2 289	1 958	13	5	6	5	6	5
California	896	11 925	10 082	12 500	13 441	11 679	5	2	2	2	2	2
Colorado	143	3 767	2 482	4 240	4 739	3 605	11	3	3	4	4	4
Connecticut	163	2 375	1 475	2 771	2 859	2 395	9	3	3	3	3	3
Delaware	30	1 083	534	1 224	1 404	1 171	12	3	4	4	4	2
District of Columbia	10	590	578	602	554	624	22	3	3	3	4	4
Florida	480	12 010	11 103	12 200	12 402	12 334	7	2	2	2	2	2
Georgia	264	7 116	5 627	9 687	6 767	6 380	10	2	2	2	3	3
Hawaii	43	2 452	2 528	2 478	2 462	2 341	19	1	1	1	3	1
Idaho	76	1 651	1 265	1 834	1 994	1 513	10	4	4	5	5	5
Illinois	437	8 553	3 858	10 105	11 646	8 606	8	2	2	2	2	2
Indiana	197	4 396	2 497	4 990	5 566	4 533	11	3	4	3	3	4
Iowa	158	4 301	1 909	6 260	5 301	3 735	10	3	3	2	3	3
Kansas	135	3 484	2 510	3 321	5 032	3 072	13	3	3	4	3	2
Kentucky	208	4 210	2 860	4 394	5 026	4 559	9	3	2	3	3	4
Louisiana	132	5 619	5 012	5 889	6 162	5 414	14	2	2	3	2	3
Maine	70	2 168	1 481	2 296	2 525	2 371	13	3	2	3	3	4
Maryland	180	5 455	4 192	5 312	5 758	6 557	9	2	2	2	2	3
Massachusetts	230	2 285	1 181	2 396	2 871	2 692	9	4	5	4	4	4
Michigan	309	5 168	2 135	5 959	7 207	5 372	7	3	4	3	3	3
Minnesota	274	5 418	2 109	6 365	7 999	5 200	9	4	5	4	4	4
Mississippi	137	3 102	2 556	3 292	3 397	3 162	13	4	4	4	4	4
Missouri	188	4 153	2 855	4 669	5 427	3 663	10	3	3	3	3	3
Montana	90	1 359	820	1 588	1 816	1 213	14	5	5	4	5	7
Nebraska	69	1 888	1 025	2 172	2 362	1 993	14	6	7	6	6	6
Nevada	72	1 353	998	1 457	1 533	1 425	20	5	5	7	5	4
New Hampshire	69	1 007	441	1 111	1 379	1 099	20	5	9	5	5	5
New Jersey	335	4 563	3 059	4 964	5 291	4 937	7	2	3	2	3	3
New Mexico	51	1 885	1 697	2 010	2 012	1 820	21	3	3	3	3	3
New York	536	8 563	4 738	9 791	10 889	8 834	6	2	3	3	3	2
North Carolina	324	7 553	6 316	7 834	8 247	7 814	9	2	2	3	3	2
North Dakota	43	1 022	436	1 255	1 564	832	19	5	9	4	4	6
Ohio	375	8 699	4 494	9 865	11 021	9 415	5	2	2	2	1	2
Oklahoma	151	2 518	2 309	2 549	2 661	2 551	11	3	3	3	3	4
Oregon	244	2 167	2 242	2 019	2 591	1 815	9	4	3	5	4	4
Pennsylvania	418	9 014	5 648	10 049	11 046	9 312	7	2	3	2	2	2
Rhode Island	29	644	299	714	788	775	12	6	7	6	6	6
South Carolina	121	2 590	2 301	2 611	2 797	2 652	13	4	5	4	4	4
South Dakota	106	1 330	761	1 588	1 719	1 250	16	8	7	10	9	10
Tennessee	191	5 042	3 708	5 320	5 579	5 560	10	2	2	2	2	2
Texas	576	17 249	16 156	17 358	18 192	17 288	6	2	1	2	2	2
Utah	75	2 058	1 464	2 299	2 581	1 888	9	4	5	5	5	3
Vermont	23	217	82	216	295	277	35	7	10	7	7	8
Virginia	358	7 209	5 878	7 571	7 945	7 440	9	3	3	3	3	3
Washington	259	4 629	3 503	4 739	5 584	4 692	10	2	3	2	3	3
West Virginia	78	1 871	1 289	2 168	2 117	1 908	13	2	3	2	2	3
Wisconsin	152	3 803	1 369	4 640	5 437	3 766	11	2	5	2	2	2
Wyoming	66	1 041	689	1 178	1 415	883	20	7	5	6	9	7

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	35 331 607	10 029	32 307 789	1 817	3 023 818	34 161 427	3.4	(Z)	(Z)	1
Alabama-----	475 096	149	415 109	34	59 987	433 635	9.6	2	2	2
Alaska -----	309 021	113	304 910	*4	*4 110	320 912	-3.7	4	4	61
Arizona -----	656 360	146	623 403	25	32 956	782 223	-16.1	2	2	1
Arkansas -----	373 169	109	299 365	47	73 804	313 442	19.1	5	6	10
California -----	2 588 169	896	2 559 901	45	28 268	3 058 330	-15.4	1	1	10
Colorado -----	836 113	143	664 564	20	171 550	525 537	59.1	2	3	(Z)
Connecticut -----	510 043	163	456 322	35	53 721	536 143	-4.9	2	2	1
Delaware -----	193 788	30	135 562	33	58 226	155 907	24.3	2	2	3
District of Columbia -----	119 047	10	80 938	26	38 109	117 988	.9	2	4	1
Florida -----	1 908 356	479	1 792 020	33	116 336	1 913 657	-3	1	1	1
Georgia -----	946 078	262	842 407	47	103 671	1 018 646	-7.1	2	2	(Z)
Hawaii -----	(D)	43	(D)	1	(D)	183 157	(D)	(D)	(D)	(D)
Idaho -----	239 844	76	188 543	40	51 300	107 123	123.9	3	3	6
Illinois -----	1 677 302	437	1 646 616	49	30 686	1 569 568	6.9	1	1	23
Indiana -----	760 743	197	715 124	39	45 619	559 660	35.9	2	2	1
Iowa -----	668 126	156	626 196	49	41 930	390 521	71.1	2	2	3
Kansas -----	497 676	132	417 430	36	80 246	501 935	-8	1	2	1
Kentucky -----	663 008	204	592 748	47	70 260	628 464	5.5	2	2	(Z)
Louisiana -----	617 647	132	579 282	19	38 365	682 748	-9.5	3	3	(Z)
Maine -----	182 488	70	(D)	14	(D)	187 286	-2.6	4	(D)	(D)
Maryland -----	757 671	178	641 911	58	115 760	985 311	-23.1	2	2	1
Massachusetts -----	391 230	230	372 682	25	18 548	515 233	-24.1	2	3	(Z)
Michigan -----	883 064	308	843 639	21	39 426	886 949	-4	2	2	(Z)
Minnesota -----	1 007 238	273	977 621	21	29 617	793 746	26.9	1	1	(Z)
Mississippi -----	450 990	137	396 838	32	54 153	326 181	38.3	4	4	3
Missouri -----	727 624	175	605 233	65	122 391	615 772	18.2	3	3	5
Montana -----	222 444	90	203 806	25	18 638	216 385	2.8	4	4	6
Nebraska -----	305 908	67	267 977	60	37 931	217 169	40.9	11	12	2
Nevada -----	275 820	72	230 385	34	45 436	304 094	-9.3	3	3	1
New Hampshire -----	121 496	68	98 881	18	22 616	168 189	-27.8	6	7	(Z)
New Jersey -----	867 559	333	793 002	59	74 557	902 345	-3.9	2	2	6
New Mexico -----	298 628	51	212 776	30	85 852	359 065	-16.8	2	2	5
New York -----	1 672 160	535	1 601 284	35	70 876	1 770 316	-5.5	3	3	1
North Carolina -----	1 027 842	323	944 124	50	83 719	842 480	22.0	2	2	1
North Dakota -----	145 139	43	112 641	16	32 497	162 497	-10.7	3	4	1
Ohio -----	1 672 846	373	1 630 308	56	42 538	1 130 000	48.0	1	1	3
Oklahoma -----	454 325	151	355 362	31	98 962	380 357	19.4	2	2	1
Oregon -----	343 740	242	313 382	26	30 359	351 618	-2.2	3	3	4
Pennsylvania -----	1 529 718	406	1 439 824	45	89 894	1 540 843	-7	2	2	2
Rhode Island -----	95 862	29	91 129	13	4 733	103 845	-7.7	3	3	1
South Carolina -----	357 607	120	308 578	50	49 029	477 678	-25.1	2	3	1
South Dakota -----	232 408	106	167 939	37	64 469	160 339	44.9	5	7	3
Tennessee -----	790 059	191	742 209	55	47 850	663 695	19.0	1	2	7
Texas -----	2 349 559	576	2 206 282	35	143 277	3 254 870	-27.8	1	1	(Z)
Utah -----	280 297	75	273 815	10	6 482	271 274	3.3	2	2	1
Vermont -----	(D)	23	(D)	14	(D)	80 397	(D)	(D)	(D)	(D)
Virginia -----	985 669	357	829 281	72	156 387	1 065 667	-7.5	2	2	1
Washington -----	742 738	259	659 217	44	83 520	524 858	41.5	2	2	1
West Virginia -----	285 406	78	225 437	67	59 969	304 005	-6.1	2	3	3
Wisconsin -----	858 386	152	846 035	26	12 351	596 792	43.8	1	1	17
Wyoming -----	175 782	61	130 299	44	45 482	202 552	-13.2	3	4	3

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	36 645 834	35 528 035	(Z)	(Z)
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS				
General building contractor	194 467	273 063	4	2
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS				
Excavating, earthmoving, and land clearing contractor, not connected with buildings	317 479	1 863 206	2	1
Heavy construction contractor	2 597 496	2 894 429	1	1
Highway and street general contractor	19 303 233	19 243 208	(Z)	(Z)
Paving contractor	12 265 997	8 877 237	1	1
SPECIAL TRADE CONTRACTORS				
Asphalt contractor, private driveways and parking areas	172 646	(NA)	3	(NA)
Excavating, earth and land clearing contractor, connected with buildings	188 810	165 463	2	3
Other construction activities	315 679	553 351	3	(NA)
OTHER BUSINESS ACTIVITIES				
Manufacturing	545 345	519 006	(Z)	1
Mining services	283 645	143 004	1	1
Rental of construction machinery or equipment to others	111 751	142 125	3	2
Retail trade	170 774	97 934	2	2
Other business activities	168 057	443 596	2	(NA)
Kind of business activity, n.s.k.	10 455	312 414	31	2

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	25.5	25.9	1
Number of construction workers	20.9	21.8	1
Number of all other employees	4.6	4.1	1
Payroll, all employees \$1,000 ..	729.2	640.9	1
Payroll, construction workers do ..	540.8	491.3	1
Payroll, other employees do ..	188.4	149.6	1
Dollar value of business done do ..	3 631.8	3 233.9	1
Value of construction work do ..	3 501.5	3 109.5	1
Cost of materials, components, supplies, and fuels do ..	1 334.6	1 113.3	1
Construction work subcontracted to others do ..	740.2	562.3	1
Rental cost for machinery, equipment, and buildings do ..	111.6	114.6	2
Capital expenditures, other than land do ..	127.0	123.2	2
Gross book value of depreciable assets do ..	1 360.4	1 006.4	1
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	28.6	24.8	(Z)
Dollar value of business done do ..	142.4	124.9	(Z)
Value added†† do ..	61.0	60.2	(Z)
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	25.8	22.6	(Z)
Value of construction work do ..	167.3	142.9	(Z)
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	41.2	36.3	(Z)
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.208	.206	(Z)
Cost of materials, components, supplies, and fuels do ..	.381	.358	(Z)
Cost of construction work subcontracted out to others do ..	.211	.181	(Z)
Value of construction work subcontracted in from others do ..	.208	.207	1
Rental cost for machinery, equipment, and buildings do ..	.032	.037	1

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	25.5	28.6	167.3	.208	.381	.211	.208	.032
Alabama -----	28.7	20.4	121.1	.197	.362	.189	.230	.020
Alaska -----	15.2	46.4	209.3	.262	.443	.163	.117	.038
Arizona -----	29.8	27.7	182.8	.190	.346	.222	.176	.045
Arkansas -----	21.8	20.9	154.8	.161	.425	.166	.170	.020
California -----	17.3	37.2	228.8	.212	.359	.237	.241	.055
Colorado -----	33.1	29.6	199.3	.187	.323	.213	.145	.040
Connecticut -----	18.3	34.5	198.0	.219	.427	.191	.173	.041
Delaware -----	46.2	28.9	178.5	.209	(D)	.170	.207	.048
District of Columbia -----	71.3	36.5	166.6	.268	.370	.229	.381	.042
Florida -----	30.6	23.0	156.0	.180	.334	.275	.221	.033
Georgia -----	32.0	20.1	138.4	.172	.371	.248	.155	.017
Hawaii -----	71.6	44.7	264.0	.215	.373	.247	.166	.027
Idaho -----	26.4	24.4	134.7	.221	.286	.187	.174	.036
Illinois -----	24.2	36.2	199.1	.225	.350	.201	.200	.040
Indiana -----	27.6	32.5	173.8	.231	.432	.207	.209	.030
Iowa -----	31.9	25.9	175.0	.173	.415	.230	.162	.016
Kansas -----	31.4	24.1	139.6	.210	.417	.228	.231	.025
Kentucky -----	23.9	25.2	161.8	.184	.442	.223	.170	.027
Louisiana -----	50.4	19.3	119.4	.191	.501	.154	.133	.025
Maine -----	38.7	26.9	108.3	.309	.338	.135	.251	.030
Maryland -----	38.5	27.8	144.7	.243	.301	.233	.219	.040
Massachusetts -----	12.4	32.0	181.9	.220	.324	.191	.213	.024
Michigan -----	20.3	31.2	188.1	.202	.379	.207	.225	.031
Minnesota -----	23.6	36.3	205.7	.211	.350	.213	.211	.035
Mississippi -----	27.4	21.0	136.3	.187	.479	.211	.305	.032
Missouri -----	27.0	30.1	187.5	.196	.376	.258	.186	.026
Montana -----	17.9	30.8	164.2	.222	.296	.189	.209	.040
Nebraska -----	32.7	26.1	167.6	.184	.392	.221	.201	.022
Nevada -----	22.7	34.1	172.0	.240	.385	.130	.223	.039
New Hampshire -----	18.3	32.1	154.1	.263	(D)	.137	.230	.053
New Jersey -----	16.9	36.9	189.1	.242	.330	.193	.223	.033
New Mexico -----	42.5	22.5	114.0	.226	.366	.169	.091	.025
New York -----	20.1	35.1	192.7	.229	.338	.167	.180	.029
North Carolina -----	28.1	22.3	134.3	.200	.419	.222	.265	.026
North Dakota -----	27.0	26.6	150.3	.200	.283	.198	.139	.047
Ohio -----	28.5	33.3	201.3	.203	.469	.205	.208	.020
Oklahoma -----	19.9	23.1	151.1	.183	.487	.153	.211	.029
Oregon -----	10.9	28.1	158.2	.217	.409	.179	.213	.046
Pennsylvania -----	26.1	29.9	166.9	.217	.365	.194	.197	.028
Rhode Island -----	28.7	32.8	161.9	.260	(D)	.171	.132	.047
South Carolina -----	26.2	20.9	142.8	.179	.391	.263	.216	.021
South Dakota -----	14.5	22.4	131.7	.196	.308	.166	.248	.029
Tennessee -----	31.2	24.4	157.9	.183	.409	.220	.194	.022
Texas -----	35.1	21.9	129.1	.199	.418	.196	.194	.031
Utah -----	33.4	26.7	145.4	.225	.396	.249	.204	.036
Vermont -----	11.7	27.2	144.5	.234	.540	.131	.367	.015
Virginia -----	24.8	23.3	125.6	.227	.377	.202	.256	.025
Washington -----	22.2	34.5	186.0	.231	.365	.183	.226	.020
West Virginia -----	29.0	28.6	140.7	.248	.398	.196	.187	.030
Wisconsin -----	29.9	39.4	240.4	.196	.350	.270	.335	.033
Wyoming -----	18.4	25.7	125.9	.240	.348	.163	.122	.044

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
- **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
- **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- **Outdoor swimming pools.** Includes wading pools and reflecting pools.
- **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
- **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
- **Fencing.** Includes all types of fencing.
- **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
- **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
- **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- **Harbor and port facilities.** Includes docks, piers, and wharves.
- **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
- **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
- **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
- **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
- **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

Nonbuilding construction:

- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

1992

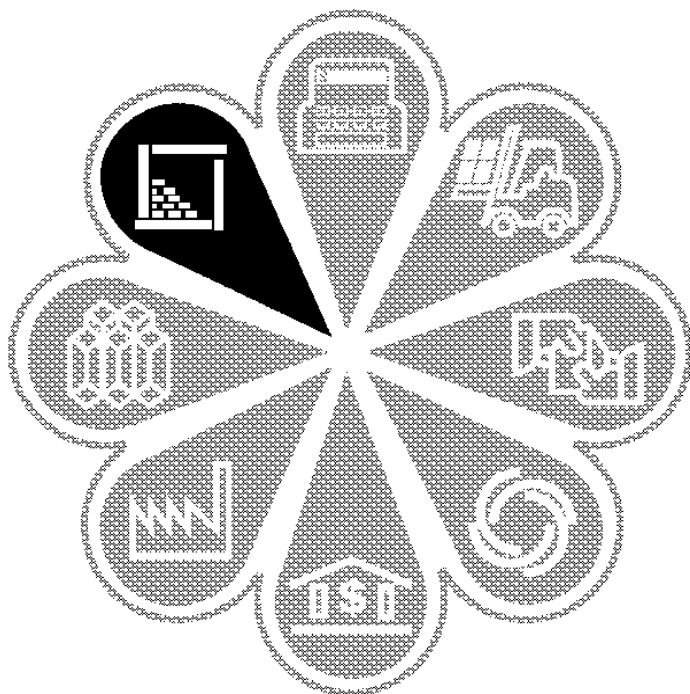
Census of Construction Industries

CC92-I-7

INDUSTRY SERIES

Bridge, Tunnel, and Elevated Highway Construction Contractors

Industry 1622



1992 Census of Construction Industries

CC92-I-7

INDUSTRY SERIES

Bridge, Tunnel, and Elevated Highway Construction Contractors

Industry 1622

Issued July 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{p_i}$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Bridge, Tunnel, and Elevated Highway Construction Contractors

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appears as part of the number of each page]

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**Statistics for Establishments Without Payroll appear in the U.S. Industry
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Summary of Findings

Establishments classified in this industry are primarily engaged in the construction of bridges; viaducts; elevated highways; and highway, pedestrian, and railway tunnels. General contractors primarily engaged in subway construction are classified in Industry 1629, Heavy Construction Contractors, Not Elsewhere Classified. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$7.3 billion in total dollar value of business. Of this amount, \$7.2 billion were for the value of construction work. These establishments paid out \$2.2 billion for materials, components, and supplies and \$1.9 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$108 million. Value added for 1992 was \$3.1 billion.

There were 1,041 establishments with total employment averaging 43,701 during the year. Total payroll for 1992 was \$1.5 billion.

Larger establishments with 20 employees or more, while representing only 47 percent of the total number of employer establishments in this industry, accounted for 90 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

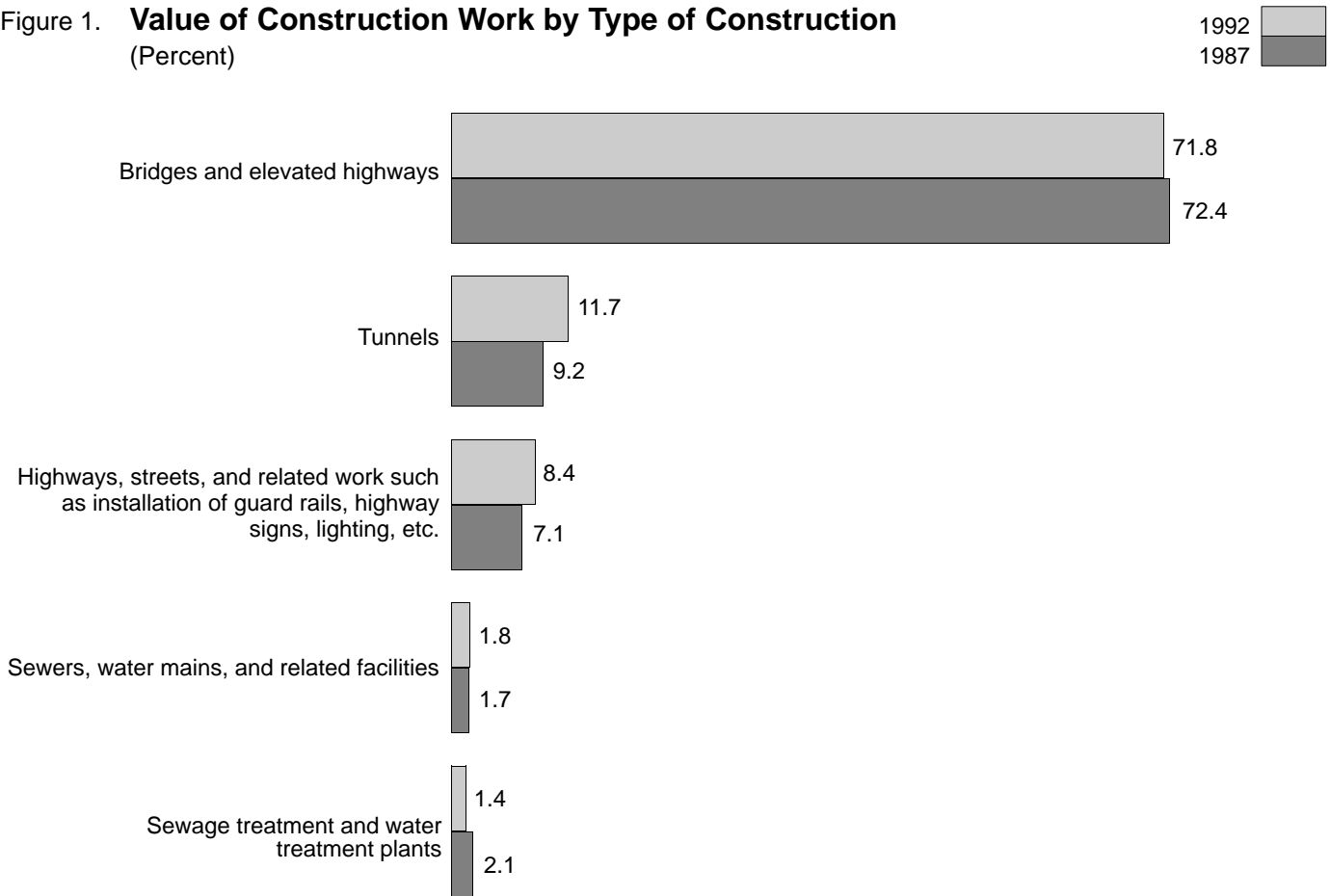


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

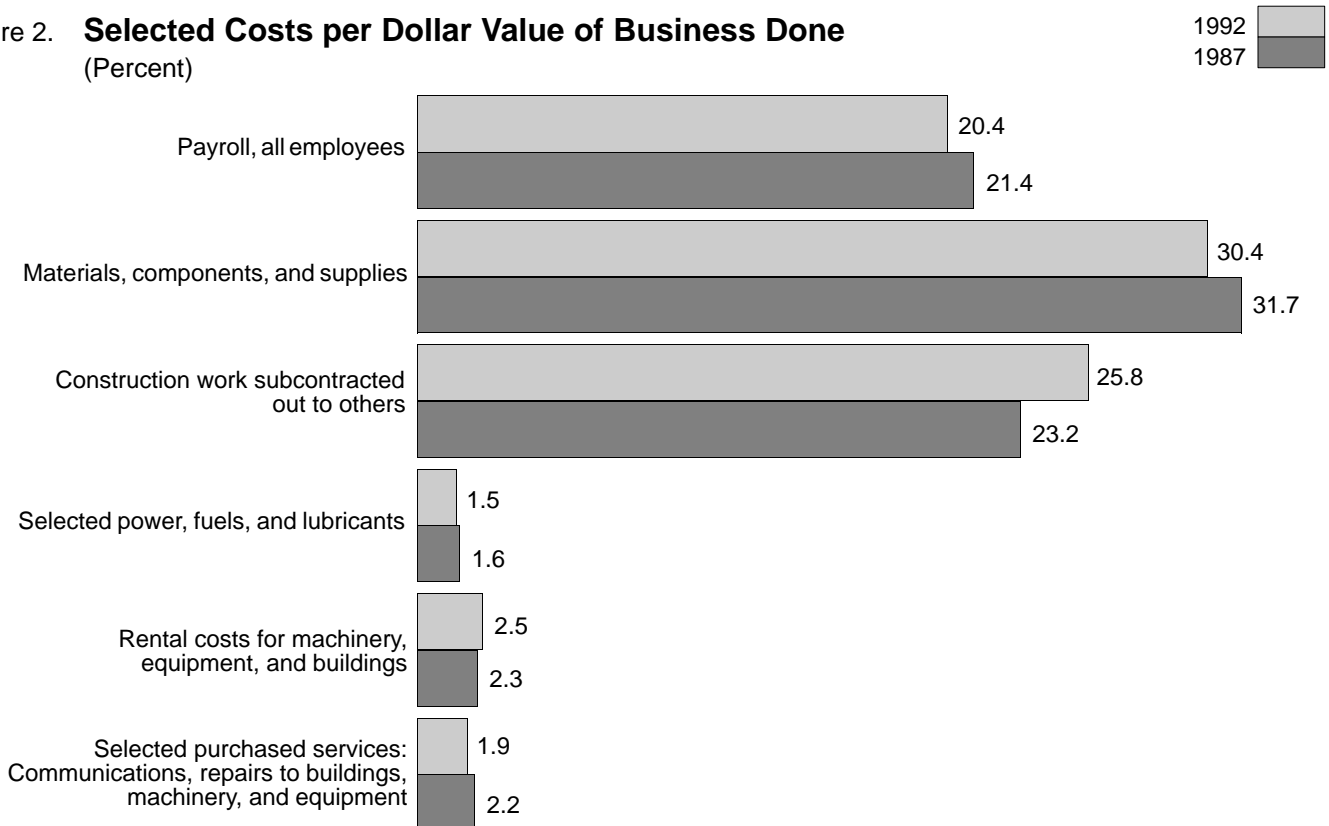


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	1 041	43 701	36 116	1 485 491	1 125 201	7 198 275	5 315 950	3 078 306	2 326 306
Alabama -----	15	763	632	16 240	12 549	92 482	63 712	27 009	37 057
Alaska -----	4	118	83	6 048	4 307	25 059	22 873	(D)	14 239
Arizona -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Arkansas -----	19	308	255	6 141	4 499	34 353	24 482	14 260	10 557
California -----	50	2 255	1 809	101 186	79 146	592 300	357 290	186 155	179 593
Colorado -----	10	358	291	11 614	9 185	73 587	46 677	23 603	(D)
Connecticut -----	26	1 167	921	43 395	29 437	182 422	142 931	92 845	52 105
Delaware -----	(S)	*75	52	2 598	1 559	11 913	(D)	5 453	(D)
District of Columbia -----	—	—	—	—	—	—	—	—	—
Florida -----	32	1 781	1 476	45 063	32 005	312 602	205 848	79 328	128 381
Georgia -----	27	1 002	802	22 065	15 706	110 442	85 024	53 428	31 612
Hawaii -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Idaho -----	4	100	81	2 877	2 252	12 181	10 544	5 796	4 919
Illinois -----	52	3 062	2 594	128 128	100 380	552 142	414 404	283 334	132 490
Indiana -----	32	2 252	1 852	92 367	72 229	354 663	288 560	136 836	155 333
Iowa -----	28	794	673	18 554	14 493	73 159	61 951	24 399	41 783
Kansas -----	18	918	805	23 629	19 039	106 140	81 227	41 804	43 811
Kentucky -----	24	714	607	22 027	17 315	108 917	84 639	43 330	42 208
Louisiana -----	12	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Maine -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Maryland -----	22	945	807	21 437	16 479	76 689	62 489	38 107	24 803
Massachusetts -----	32	1 557	1 178	69 542	46 639	497 175	324 593	212 732	122 876
Michigan -----	29	607	495	21 689	16 379	108 551	75 805	42 002	34 130
Minnesota -----	11	857	722	28 407	21 345	142 610	(D)	(D)	56 732
Mississippi -----	12	978	855	21 395	17 253	119 275	82 485	49 569	(D)
Missouri -----	38	1 199	980	38 005	28 953	187 041	154 810	90 688	67 243
Montana -----	5	111	100	(D)	2 314	(D)	(D)	(D)	5 571
Nebraska -----	6	63	50	2 054	1 267	14 658	11 490	7 425	4 065
Nevada -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Hampshire -----	7	120	86	3 715	2 575	19 636	12 598	7 687	6 385
New Jersey -----	24	1 067	846	48 780	35 824	169 713	146 054	94 691	54 835
New Mexico -----	(S)	127	118	(D)	2 195	18 551	(D)	(D)	7 306
New York -----	96	4 232	3 462	184 300	137 555	760 910	565 471	387 577	188 183
North Carolina -----	14	599	511	14 097	9 610	71 756	53 013	26 140	26 979
North Dakota -----	4	182	157	5 326	4 263	24 934	19 442	10 798	8 644
Ohio -----	57	1 712	1 294	61 359	46 309	278 470	216 309	126 190	93 078
Oklahoma -----	29	691	607	17 825	14 265	93 399	76 335	40 173	38 067
Oregon -----	7	253	203	9 502	7 118	57 545	38 059	22 909	(D)
Pennsylvania -----	66	2 935	2 398	86 218	63 739	403 860	300 275	202 207	104 953
Rhode Island -----	4	137	106	(D)	4 371	24 169	18 043	(D)	(D)
South Carolina -----	13	440	364	10 917	7 332	49 741	40 952	(D)	21 205
South Dakota -----	3	38	31	(D)	675	3 879	(D)	1 737	(D)
Tennessee -----	30	1 433	1 262	35 770	27 549	204 114	136 954	64 753	73 366
Texas -----	56	1 368	1 136	31 495	23 192	176 393	150 985	84 136	67 169
Utah -----	*9	137	117	3 564	2 656	21 760	10 710	6 154	4 556
Vermont -----	13	252	216	5 681	4 129	23 084	17 797	10 990	7 748
Virginia -----	29	987	836	25 829	19 333	126 648	91 448	49 892	41 620
Washington -----	23	1 414	1 023	62 914	45 547	235 643	190 397	126 915	67 549
West Virginia -----	6	140	119	5 706	4 571	27 422	21 813	12 018	9 869
Wisconsin -----	12	1 155	1 007	44 257	36 219	323 954	211 177	112 780	(D)
Wyoming -----	*8	211	172	4 421	3 174	20 359	15 302	8 841	7 087

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
1 882 325	874 650	182 852	155 163	1 602 798	47 494	5 480 936	2 430 434	1	1	1	U.S.
28 770	16 386	807	3 845	28 372	530	57 804	22 516	5	3	26	AL
2 186	(D)	757	1 256	11 062	(D)	(D)	(D)	(Z)	(Z)	(Z)	AK
(D)	(D)	(D)	(D)	(D)	1 214	130 042	48 277	(D)	(D)	(D)	AZ
9 871	4 263	502	1 467	10 820	356	46 105	15 845	15	13	11	AR
235 010	124 739	21 128	11 658	94 222	1 940	301 677	153 566	2	1	4	CA
26 910	12 742	937	651	14 770	693	108 254	20 984	(Z)	(Z)	7	CO
39 491	16 616	9 223	1 452	41 119	1 068	150 625	90 928	2	2	(Z)	CT
(D)	824	191	546	4 692	*46	(D)	*3 339	40	(D)	31	DE
—	—	—	—	—	—	—	—	—	—	—	DC
106 754	38 463	12 326	9 338	38 896	853	107 728	33 219	4	2	3	FL
25 417	30 420	888	3 913	36 247	1 212	122 850	54 093	11	6	10	GA
(D)	—	(D)	—	(D)	—	—	—	(D)	(D)	—	HI
1 637	156	86	(D)	6 082	155	19 087	10 029	(Z)	(Z)	(D)	ID
137 738	30 552	11 897	11 344	132 178	2 393	257 699	111 479	3	8	3	IL
66 103	12 556	6 512	9 750	77 492	1 850	241 116	108 457	(Z)	(Z)	(Z)	IN
11 208	7 238	482	4 126	31 919	1 019	112 782	42 378	5	5	20	IA
24 914	19 259	1 793	2 684	38 955	1 040	103 921	46 431	4	6	5	KS
24 278	14 797	1 916	3 024	30 044	821	88 839	29 498	1	(Z)	3	KY
5 137	(D)	4 714	3 485	59 300	702	64 330	25 513	(D)	(D)	21	LA
(D)	184	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	ME
14 200	2 323	1 806	1 635	30 542	850	98 568	45 631	2	3	1	MD
172 582	13 506	7 223	6 897	55 210	514	60 456	29 143	3	1	5	MA
32 746	15 509	1 164	3 606	32 015	675	112 063	39 162	5	2	6	MI
(D)	2 743	6 615	2 235	34 107	1 413	154 728	77 980	(Z)	(D)	8	MN
36 790	16 919	2 933	3 441	35 127	973	102 676	40 007	(Z)	(Z)	(Z)	MS
32 231	23 941	4 066	4 562	50 169	1 457	140 984	52 901	4	16	6	MO
1 015	3 021	232	418	4 126	112	7 460	4 929	(Z)	(Z)	(Z)	MT
3 168	1 659	109	385	5 032	292	24 245	10 205	(Z)	(Z)	(Z)	NE
—	(D)	—	(D)	(D)	(D)	9 647	5 330	(D)	(D)	(D)	NV
7 038	2 587	599	215	6 536	130	15 740	8 174	18	15	(Z)	NH
23 659	12 518	6 315	1 873	37 980	1 581	213 386	123 530	1	1	8	NJ
(D)	*4 075	—	62	2 693	513	(D)	25 315	22	(D)	18	NM
195 440	49 209	21 846	11 569	145 104	3 583	323 040	176 688	1	2	4	NY
18 743	22 375	3 647	2 521	18 246	1 694	144 088	44 494	(Z)	(Z)	(Z)	NC
5 492	(D)	(D)	499	6 957	218	21 090	9 765	(Z)	(Z)	(Z)	ND
62 160	44 013	4 309	9 219	50 896	1 660	203 375	94 500	2	2	7	OH
17 064	16 766	2 799	1 828	30 683	649	62 085	34 913	7	6	8	OK
19 486	2 250	3 400	1 576	5 830	421	55 915	22 370	(Z)	(Z)	12	OR
103 585	92 672	11 709	5 705	107 236	3 425	461 661	232 990	5	3	3	PA
6 126	4 809	1 143	652	4 307	87	16 094	7 264	(Z)	(Z)	(Z)	RI
8 789	23 931	1 513	1 030	13 086	825	102 591	31 931	4	4	25	SC
(D)	(D)	(D)	47	822	(D)	(D)	(D)	(Z)	(Z)	(Z)	SD
67 160	28 049	2 408	4 702	45 864	1 230	114 007	53 398	4	4	6	TN
25 409	50 843	5 907	5 554	40 775	3 950	400 159	194 806	7	5	10	TX
11 050	6 127	517	660	5 974	(D)	(D)	5 057	19	20	16	UT
5 287	3 518	148	704	11 069	305	30 722	16 245	17	12	(Z)	VT
35 200	18 671	5 297	1 089	26 413	2 440	278 343	84 944	7	6	14	VA
45 245	13 515	6 763	4 344	52 021	827	126 006	49 229	1	1	(Z)	WA
5 609	(S)	601	376	10 513	290	31 295	15 174	(Z)	(Z)	(Z)	WV
112 777	22 867	3 637	6 757	55 340	977	148 661	61 930	(Z)	(Z)	1	WI
5 057	3 537	506	1 109	*9 848	(D)	(D)	(D)	22	19	39	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	1 041	1 159	999	979	3	3	2	2
Proprietors and working partners	103	161	162	256	12	15	9	7
All employees**	43 701	47 494	37 581	38 093	1	1	(Z)	(Z)
Construction workers:								
March	29 284	33 019	26 749	25 728	1	1	(Z)	(Z)
May	37 483	41 884	33 565	33 852	1	1	(Z)	(Z)
August	41 405	45 462	36 474	38 435	1	1	(Z)	(Z)
November	36 291	40 012	32 703	34 653	1	1	(Z)	(Z)
Average	36 116	40 092	32 473	33 187	1	1	(Z)	(Z)
Other employees:								
March	7 423	7 255	5 102	4 793	1	1	1	(Z)
May	7 574	7 379	(NA)	(NA)	1	1	(NA)	(NA)
August	7 760	7 562	(NA)	(NA)	1	1	(NA)	(NA)
November	7 585	7 404	(NA)	(NA)	1	1	(NA)	(NA)
Average	7 585	7 402	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	1 485 491	1 191 764	815 514	535 877	(Z)	1	(Z)	(Z)
Payroll, construction workers	1 125 201	909 919	664 873	438 750	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	360 290	281 844	150 641	97 128	1	1	(Z)	(Z)
First-quarter payroll, all employees	289 139	227 384	157 316	96 496	1	1	(Z)	(Z)
Fringe benefits, all employees	498 795	341 151	154 749	107 594	1	1	(Z)	(Z)
Legally required expenditures	302 296	225 313	115 304	64 721	1	1	(Z)	(Z)
Voluntary expenditures	196 500	115 838	39 445	42 873	1	1	1	(Z)
Dollar value of business done	7 286 936	5 579 414	3 549 200	2 270 818	1	1	(Z)	(Z)
Value of construction work	7 198 275	5 480 936	3 503 890	2 247 284	1	1	(Z)	(Z)
Value of construction work subcontracted in from others	874 650	745 097	377 277	300 775	3	3	1	1
Other business receipts	88 662	98 477	45 310	23 534	1	1	(Z)	1
Net value of construction work†	5 315 950	4 186 846	2 812 186	1 827 239	1	1	(Z)	(Z)
Value added††	3 078 306	2 430 434	1 468 448	962 687	1	1	(Z)	(Z)
Selected costs	4 208 630	3 148 979	2 080 752	1 308 131	1	1	(Z)	(Z)
Materials, components, and supplies	2 218 403	1 767 054	1 319 225	846 600	1	1	(Z)	(Z)
Construction work subcontracted out to others	1 882 325	1 294 090	691 704	420 045	1	1	(Z)	(Z)
Selected power, fuels, and lubricants	107 903	87 835	69 822	41 487	1	1	(Z)	(Z)
Electricity	18 040	12 623	8 964	3 281	1	1	(Z)	(Z)
Natural and manufactured gas	4 570	2 711	2 543	5 929	2	1	1	(Z)
Gasoline and diesel fuel	77 602	65 599	52 429	28 249	1	1	1	(Z)
On highway use	38 903	31 998	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	38 699	33 600	(NA)	(NA)	1	1	(NA)	(NA)
Other, including lubricating oils and greases	7 691	6 901	5 885	4 029	2	1	1	1
Rental cost for machinery, equipment, and buildings	182 852	129 896	79 216	62 763	2	2	1	1
For machinery and equipment	158 897	118 516	71 952	59 428	2	2	1	1
For buildings	23 955	11 380	7 263	3 336	2	2	1	(Z)
Selected purchased services	135 848	121 319	80 717	50 732	2	1	1	(Z)
Communication services	18 929	12 750	9 678	5 132	2	1	1	1
Repairs to buildings and other structures	5 010	3 950	2 381	2 168	6	1	2	1
Repairs to machinery and equipment	111 909	104 618	68 657	43 432	2	1	(Z)	(Z)
Ownership of construction projects:								
Value of construction work	7 198 275	5 480 936	3 503 890	2 247 284	1	1	(Z)	(Z)
Government owned	6 604 244	4 803 659	3 011 288	1 904 579	1	1	(Z)	(Z)
Federal	840 864	1 100 377	(NA)	(NA)	2	1	(NA)	(NA)
State and local	5 763 380	3 703 281	(NA)	(NA)	1	1	(NA)	(NA)
Privately owned	594 030	677 277	492 601	342 705	2	2	1	(Z)

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 528 591	1 210 909	1	1
Capital expenditures, other than land -----	155 163	151 743	1	2
New -----	115 302	107 836	2	2
Used -----	39 861	43 907	2	4
Retirements and disposition of depreciable assets -----	80 956	61 476	2	5
End-of-year gross book value of depreciable assets -----	1 602 798	1 301 176	1	1
Depreciation charges during year -----	151 083	128 527	1	1
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	90 430	102 438	2	4
Capital expenditures, other than land -----	3 694	12 035	6	6
New buildings and other structures -----	2 602	9 174	4	7
Used buildings and other structures -----	1 092	2 861	18	12
Retirements and disposition of depreciable assets -----	*2 835	642	43	16
End-of-year gross book value of depreciable assets -----	91 289	113 831	1	4
Depreciation charges during year -----	5 961	9 216	2	6
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 438 161	1 108 471	1	1
Capital expenditures, other than land -----	151 468	139 707	1	2
New machinery and equipment, including automobiles and trucks -----	112 700	98 661	2	1
New automobiles and trucks, intended primarily for highway use -----	28 490	25 293	3	2
Used machinery and equipment, including automobiles and trucks -----	38 769	41 045	2	4
Retirements and disposition of depreciable assets -----	78 121	60 834	1	5
End-of-year gross book value of depreciable assets -----	1 511 509	1 187 344	1	1
Depreciation charges during year -----	145 122	119 311	1	1

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	1 041	3
Value of construction work	7 198 275	1
Establishments with inventories:		
Number	320	4
Value of construction work	2 412 162	1
Inventories ¹ :		
End of 1992, materials and supplies	27 928	4
End of 1991, materials and supplies	30 736	2
Establishments with no inventories:		
Number	507	4
Value of construction work	3 809 444	1
Establishments not reporting:		
Number	213	5
Value of construction work	976 668	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	1 041	158	164	232	262	133	68	17	4	2
All employees** -----	43 701	380	1 094	3 198	8 497	9 219	10 495	5 527	5 293	(D)
Payroll, all employees -----	1 485 491	10 379	34 455	94 051	262 095	299 111	374 045	217 988	193 367	(D)
Dollar value of business done -----	7 286 936	62 150	149 533	485 193	1 225 465	1 497 001	1 787 493	1 213 194	866 907	(D)
Value of construction work -----	7 198 275	60 875	147 833	479 485	1 212 069	1 480 227	1 759 043	1 202 031	856 713	(D)
Net value of construction work† -----	5 315 950	51 887	116 855	384 935	940 330	1 099 353	1 281 839	782 596	<u>658 154</u>	(D)
Value added†† -----	3 078 306	29 379	71 669	230 194	564 673	602 184	788 024	445 917	346 266	(D)
Cost of materials, components, supplies, and fuels -----	2 326 306	23 783	46 886	160 450	389 054	513 943	522 265	347 842	<u>322 082</u>	(D)
Cost of construction work subcontracted out to others -----	1 882 325	8 987	30 978	94 549	271 738	380 874	477 204	419 435	198 559	(D)
Rental cost for machinery, equipment, and buildings -----	182 852	1 700	3 134	11 867	34 185	37 953	33 519	40 485	20 010	(D)
Capital expenditures, other than land -----	155 163	1 055	3 337	13 220	30 813	35 008	33 599	19 649	18 482	(D)
End-of-year gross book value of depreciable assets -----	1 602 798	27 125	37 570	127 816	318 116	306 944	419 851	178 544	<u>186 832</u>	(D)
1987										
All employees** -----	47 494	490	1 305	3 152	9 105	9 768	11 615	6 129	5 926	—
Value of construction work -----	5 480 936	80 216	105 440	311 214	1 012 190	1 195 049	1 467 884	662 080	646 862	—
Value added†† -----	2 430 434	40 075	60 692	162 045	464 736	536 510	598 293	287 386	280 696	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	16	9	6	2	(Z)	(Z)	(Z)	(Z)	(D)
Net value of construction work† -----	1	19	8	10	3	(Z)	(Z)	(Z)	(Z)	(D)
Capital expenditures, other than land -----	1	25	18	9	3	(Z)	(Z)	(Z)	(Z)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	1 041	(S)	14	23	33	97	143	242	170	144	163
All employees** -----	43 701	(S)	25	22	137	453	1 249	4 146	5 094	7 100	25 468
Payroll, all employees -----	1 485 491	(S)	170	434	2 005	9 702	27 863	108 481	141 763	233 937	961 100
Dollar value of business done -----	7 286 936	(S)	488	1 403	5 229	34 994	103 801	394 467	582 870	1 029 201	5 134 343
Value of construction work -----	7 198 275	(S)	484	1 399	5 109	34 404	101 723	386 646	575 406	1 016 053	5 076 910
Net value of construction work† -----	5 315 950	(S)	431	(S)	4 784	31 864	89 586	322 928	457 381	801 679	3 606 218
Value added†† -----	3 078 306	(S)	270	(S)	2 984	19 216	59 210	182 323	271 146	461 104	2 081 257
Cost of materials, components, supplies, and fuels -----	2 326 306	(S)	165	248	1 920	13 238	32 454	148 427	193 699	353 723	1 582 394
Cost of construction work subcontracted out to others -----	1 882 325	(S)	53	(S)	325	2 540	12 137	63 717	118 025	214 374	1 470 692
Rental cost for machinery, equipment, and buildings -----	182 852	(S)	12	72	281	1 146	3 885	10 498	17 728	25 834	123 392
Capital expenditures, other than land -----	155 163	(S)	8	(S)	(S)	915	4 190	11 279	15 420	27 317	95 854
End-of-year gross book value of depreciable assets -----	1 602 798	33	441	338	(S)	18 316	41 222	135 506	184 561	259 341	960 999
1987											
All employees** -----	47 494	(S)	(S)	*140	393	977	1 708	4 861	5 707	8 354	25 337
Value of construction work -----	5 480 936	(S)	(S)	3 081	14 694	58 723	120 023	392 836	571 431	942 730	3 376 825
Value added†† -----	2 430 434	(S)	(S)	2 138	8 828	35 693	68 266	198 640	281 734	423 046	1 411 842
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	10	38	4	14	11	5	2	1	(Z)
Net value of construction work† -----	1	(S)	9	(S)	3	16	10	5	2	4	1
Capital expenditures, other than land -----	1	(S)	(Z)	(S)	(S)	20	25	10	1	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	7 198 275	4 872 281	1 771 950	554 014	1	1	1	2
Building construction	88 456	73 772	9 366	5 318	3	4	6	8
Nonbuilding construction	7 109 789	4 798 508	1 762 584	548 696	1	1	1	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	605 191	373 621	170 878	60 693	1	1	1	3
Bridges, tunnels, and elevated highways	6 005 289	4 126 291	1 452 536	426 463	1	1	1	2
Tunnels	839 811	794 175	24 207	21 429	5	5	10	10
Bridges and elevated highways	5 165 478	3 332 116	1 428 328	405 034	1	1	1	2
Marine construction	48 537	34 376	10 284	3 877	(Z)	(Z)	(Z)	(Z)
Conservation and development construction	40 405	19 193	1 466	19 746	(Z)	(Z)	(Z)	(Z)
Sewers, water mains, and related facilities	126 824	66 529	51 110	9 185	2	3	1	4
Sewers, sewer lines, septic systems, and related facilities	87 124	50 414	28 312	8 398	(Z)	(Z)	(Z)	(Z)
Water mains and related facilities	39 700	16 116	22 798	*786	6	11	2	41
Mass transit construction	35 642	17 488	11 207	6 947	(Z)	(Z)	(Z)	(Z)
Sewage treatment and water treatment plants	97 579	77 490	17 196	2 893	1	(Z)	8	(Z)
Sewage treatment plants	51 874	37 889	12 100	1 885	3	(Z)	11	(Z)
Water treatment plants	45 705	39 602	5 096	(S)	1	(Z)	3	(S)
Other nonbuilding construction	150 323	83 521	47 908	18 894	2	2	1	5
Construction work, n.s.k.	30	(NA)	(NA)	(NA)	(Z)	(NA)	(NA)	(NA)
1987								
Value of construction work	5 480 936	3 948 853	1 105 166	371 889	1	1	1	1
Building construction	133 195	81 232	45 106	6 856	3	4	3	2
Nonbuilding construction	5 292 714	3 867 621	1 060 059	365 033	1	1	1	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	387 161	267 621	83 705	35 834	1	(Z)	3	1
Bridges, tunnels, and elevated highways	4 476 501	3 259 359	916 856	300 284	1	1	1	2
Tunnels	505 987	403 843	77 737	24 407	1	1	1	3
Bridges and elevated highways	3 970 513	2 855 516	839 119	275 877	1	1	1	2
Marine construction	29 291	20 764	(D)	(D)	1	2	(D)	(D)
Conservation and development construction	25 624	23 160	2 233	231	1	1	(Z)	39
Sewers, water mains, and related facilities	93 450	72 816	17 436	3 196	2	2	4	3
Sewers, sewer lines, septic systems, and related facilities	52 406	40 814	9 586	2 004	2	2	2	2
Water mains and related facilities	41 044	32 001	7 850	1 191	4	4	7	6
Sewage treatment and water treatment plants	113 394	99 144	10 747	3 502	1	1	(Z)	10
Sewage treatment plants	71 097	(D)	(D)	2 251	1	(D)	(D)	10
Water treatment plants	42 296	(D)	(D)	1 251	(Z)	(D)	(D)	9
Other nonbuilding construction	167 293	124 757	(D)	(D)	(NA)	(NA)	(D)	(D)
Construction work, n.s.k.	55 027	(NA)	(NA)	(NA)	10	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work subcontracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
All establishments -----	1 041	43 701	1 485 491	7 198 275	5 665 961	5 315 950	3 078 306	1 882 325	1	1	1
Establishments not specializing by type -----	35	3 505	145 229	576 146	(NA)	439 557	233 181	136 589	2	1	1
Establishments specializing 51 percent or more -----	1 006	40 197	1 340 262	6 622 128	5 665 961	4 876 393	2 845 125	1 745 735	1	1	1
TUNNELS											
All establishments specializing in type -----	122	3 761	148 809	808 517	749 264	624 897	408 481	183 620	3	5	5
Establishments with —											
100 percent specialization -----	102	2 710	111 994	624 592	624 592	476 291	307 243	148 301	4	6	3
90 to 99 percent specialization -----	*6	*83	*1 892	*15 312	*13 885	*5 823	*4 405	(S)	52	66	(S)
80 to 89 percent specialization -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
70 to 79 percent specialization -----	8	626	22 022	(D)	68 509	85 643	56 836	(D)	(Z)	(D)	(D)
60 to 69 percent specialization -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
51 to 59 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
BRIDGES AND ELEVATED HIGHWAYS											
All establishments specializing in type -----	884	36 436	1 191 453	5 813 611	4 916 697	4 251 495	2 436 644	1 562 116	1	1	(Z)
Establishments with —											
100 percent specialization -----	500	15 531	482 956	2 423 367	2 423 367	1 786 669	1 021 689	636 698	1	1	1
90 to 99 percent specialization -----	65	4 425	141 297	726 774	679 426	531 049	281 131	195 725	1	2	2
80 to 89 percent specialization -----	65	3 736	128 485	626 902	529 516	474 051	291 805	152 851	1	1	(Z)
70 to 79 percent specialization -----	97	3 613	120 662	582 287	427 389	414 243	238 605	168 045	2	1	1
60 to 69 percent specialization -----	80	4 778	154 454	735 780	464 756	527 629	313 315	208 151	1	1	1
51 to 59 percent specialization -----	77	4 353	163 598	718 501	392 243	517 855	290 098	200 646	4	1	(Z)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	1 041	36 116	29 284	37 483	41 405	36 291	3	1	1	1	1	1
Alabama	15	632	553	611	673	692	17	4	5	4	4	5
Alaska	4	83	96	84	85	66	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Arizona	1	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
Arkansas	19	255	202	252	283	283	24	15	17	16	15	14
California	50	1 809	1 549	1 747	2 001	1 939	11	1	1	1	2	2
Colorado	10	291	237	295	341	290	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Connecticut	26	921	667	885	1 103	1 028	9	2	2	1	2	2
Delaware	(S)	52	34	48	52	75	(S)	29	22	31	29	30
District of Columbia	—	—	—	—	—	—	—	—	—	—	—	—
Florida	32	1 476	1 420	1 495	1 509	1 480	10	4	5	4	3	4
Georgia	27	802	758	842	831	777	31	13	12	14	13	12
Hawaii	2	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(Z)	(D)	(D)	(D)
Idaho	4	81	77	84	87	77	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Illinois	52	2 594	1 878	2 864	3 157	2 479	10	3	4	3	2	3
Indiana	32	1 852	1 731	1 961	2 049	1 668	5	(Z)	(Z)	(Z)	(Z)	(Z)
Iowa	28	673	492	716	762	723	16	5	8	6	5	5
Kansas	18	805	700	879	879	765	13	3	3	4	2	3
Kentucky	24	607	512	594	661	662	31	1	(Z)	(Z)	(Z)	3
Louisiana	12	(D)	(D)	(D)	(D)	(D)	18	(D)	(D)	(D)	(D)	(D)
Maine	3	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
Maryland	22	807	711	805	879	832	34	3	2	3	3	2
Massachusetts	32	1 178	1 049	1 302	1 202	1 159	10	3	3	3	3	3
Michigan	29	495	240	508	653	578	20	6	4	11	3	4
Minnesota	11	722	479	782	930	695	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Mississippi	12	855	708	868	930	915	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Missouri	38	980	840	1 094	1 168	818	17	4	3	5	5	5
Montana	5	100	82	122	92	102	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Nebraska	6	50	48	51	44	55	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Nevada	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Hampshire	7	86	58	97	105	82	16	11	6	7	12	19
New Jersey	24	846	688	874	949	871	9	1	1	1	1	2
New Mexico	(S)	118	124	126	111	110	(S)	19	18	22	15	20
New York	96	3 462	2 558	3 389	4 214	3 685	11	1	1	2	1	1
North Carolina	14	511	476	540	534	494	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
North Dakota	4	157	52	205	222	147	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Ohio	57	1 294	980	1 511	1 597	1 088	10	2	2	2	1	2
Oklahoma	29	607	593	611	597	626	18	7	6	6	7	9
Oregon	7	203	215	199	205	194	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Pennsylvania	66	2 398	1 524	2 620	2 941	2 505	6	7	4	5	8	8
Rhode Island	4	106	(D)	115	92	(D)	(Z)	(Z)	(D)	(Z)	(Z)	(D)
South Carolina	13	364	402	369	368	318	21	4	4	4	4	4
South Dakota	3	31	(D)	34	35	(D)	(Z)	(Z)	(D)	(Z)	(Z)	(D)
Tennessee	30	1 262	1 103	1 212	1 404	1 327	14	4	4	4	4	4
Texas	56	1 136	1 025	1 132	1 195	1 192	14	7	8	9	7	6
Utah	*9	117	103	108	120	138	51	19	17	16	15	19
Vermont	13	216	88	220	300	255	26	17	21	18	15	16
Virginia	29	836	799	850	883	812	16	7	6	7	7	7
Washington	23	1 023	672	1 026	1 307	1 086	15	1	(Z)	(Z)	2	2
West Virginia	6	119	80	115	147	132	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Wisconsin	12	1 007	511	1 188	1 353	976	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Wyoming	*8	172	98	169	264	159	50	25	27	16	31	23

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	7 198 275	1 020	5 956 432	468	1 241 843	5 480 936	31.3	1	1	1
Alabama -----	88 300	15	71 440	7	16 860	73 421	20.3	2	3	(Z)
Alaska -----	24 166	4	(D)	1	(D)	(D)	(D)	(Z)	(D)	(D)
Arizona -----	15 964	1	(D)	5	(D)	143 031	-88.8	(Z)	(D)	(D)
Arkansas -----	62 624	18	34 058	19	28 566	46 461	34.8	7	13	2
California -----	658 287	50	580 269	11	78 018	266 677	146.8	1	1	(Z)
Colorado -----	80 877	10	(D)	6	(D)	88 118	-8.2	(Z)	(D)	(D)
Connecticut -----	163 344	26	151 580	10	11 763	104 748	55.9	2	2	1
Delaware -----	37 059	(S)	(D)	9	(D)	14 527	155.1	2	(D)	(D)
District of Columbia -----	(D)	—	—	6	(D)	(D)	(D)	(D)	—	(D)
Florida -----	408 197	32	290 902	13	117 295	170 112	140.0	1	2	2
Georgia -----	112 829	27	95 981	13	16 848	161 513	-30.1	7	8	1
Hawaii -----	53 897	2	(D)	3	(D)	(D)	(D)	(Z)	(D)	(D)
Idaho -----	11 802	4	(D)	1	(D)	18 956	-37.7	(Z)	(D)	(D)
Illinois -----	610 871	52	529 545	17	81 326	245 685	148.6	6	7	11
Indiana -----	114 536	32	(D)	4	(D)	124 709	-8.2	(Z)	(D)	(D)
Iowa -----	89 570	27	58 563	8	31 007	62 723	42.8	4	6	(Z)
Kansas -----	83 871	15	75 206	13	8 665	120 689	-30.5	2	(Z)	17
Kentucky -----	95 413	24	87 615	*8	7 798	70 975	34.4	1	1	8
Louisiana -----	210 420	12	(D)	11	(D)	103 820	102.7	1	(D)	(D)
Maine -----	(D)	3	(D)	5	(D)	(D)	(D)	(D)	(D)	(D)
Maryland -----	108 455	22	75 273	27	33 182	137 609	-21.2	2	3	3
Massachusetts -----	496 481	32	487 228	13	9 253	44 712	1 010.4	2	2	(Z)
Michigan -----	104 311	29	(D)	3	(D)	114 384	-8.8	2	(D)	(D)
Minnesota -----	158 869	11	(D)	6	(D)	135 847	16.9	(Z)	(D)	(D)
Mississippi -----	105 405	12	83 729	8	21 676	84 055	25.4	(Z)	(Z)	(Z)
Missouri -----	151 739	34	111 293	16	40 445	125 066	21.3	12	15	16
Montana -----	19 856	5	(D)	2	(D)	8 107	144.9	(Z)	(D)	(D)
Nebraska -----	22 715	5	10 237	6	12 478	20 685	9.8	(Z)	(Z)	(Z)
Nevada -----	(D)	1	(D)	3	(D)	12 164	(D)	(D)	(D)	(D)
New Hampshire -----	28 668	6	16 836	12	11 832	29 644	-3.3	12	15	21
New Jersey -----	158 886	21	129 127	18	29 759	253 904	-37.4	(Z)	1	(Z)
New Mexico -----	(D)	(S)	(D)	*3	(D)	13 310	(D)	(D)	(D)	(D)
New York -----	782 350	96	708 666	19	73 684	371 631	110.5	2	2	3
North Carolina -----	70 992	14	64 796	19	6 195	163 455	-56.6	(Z)	(Z)	2
North Dakota -----	25 375	4	(D)	3	(D)	14 399	76.2	(Z)	(D)	(D)
Ohio -----	260 335	56	236 441	9	23 894	179 728	44.8	2	2	3
Oklahoma -----	71 892	29	(D)	4	(D)	95 879	-25.0	6	(D)	(D)
Oregon -----	61 755	7	43 882	7	17 873	67 148	-8.0	(Z)	(Z)	(Z)
Pennsylvania -----	346 262	64	304 755	20	41 506	387 042	-10.5	3	3	2
Rhode Island -----	25 993	4	22 927	5	3 066	24 864	4.5	(Z)	(Z)	(Z)
South Carolina -----	90 267	13	45 474	*15	44 792	113 544	-20.5	2	4	1
South Dakota -----	9 675	3	3 780	5	5 894	11 049	-12.4	(Z)	(Z)	(Z)
Tennessee -----	199 416	30	(D)	*8	(D)	108 016	84.6	3	(D)	(D)
Texas -----	263 147	56	151 428	16	111 719	469 842	-44.0	3	5	1
Utah -----	19 707	*9	19 707	—	—	(D)	(D)	16	16	—
Vermont -----	15 991	13	(D)	1	(D)	23 098	-30.8	10	(D)	(D)
Virginia -----	124 593	25	109 990	14	14 603	282 506	-55.9	5	6	(Z)
Washington -----	206 888	23	185 146	10	21 742	134 849	53.4	1	1	(Z)
West Virginia -----	59 587	6	26 965	15	32 622	45 756	30.2	(Z)	(Z)	(Z)
Wisconsin -----	219 970	12	209 188	7	10 782	124 934	76.1	(Z)	(Z)	7
Wyoming -----	17 374	*8	(D)	3	(D)	(D)	(D)	25	(D)	(D)

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	7 286 936	5 579 414	1	1
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS				
General building contractor	55 792	130 323	5	4
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS				
Excavating, earthmoving, and land clearing contractor, not connected with buildings	29 793	72 514	2	4
Heavy construction contractor	6 421 754	4 834 262	1	1
Highway and street general contractor	537 436	309 420	1	1
Paving contractor	86 478	67 994	3	(Z)
Other construction activities	82 388	57 966	2	12
Other business activities	73 295	96 925	1	(NA)
Kind of business activity, n.s.k.	—	10 009	—	(Z)

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	42.0	41.0	2
Number of construction workers	34.7	34.6	2
Number of all other employees	7.3	6.4	2
Payroll, all employees	1 427.5	1 028.3	2
Payroll, construction workers	1 081.3	785.1	2
Payroll, other employees	346.2	243.2	2
Dollar value of business done	7 002.7	4 814.0	2
Value of construction work	6 917.5	4 729.0	2
Cost of materials, components, supplies, and fuels	2 235.6	1 600.4	2
Construction work subcontracted to others	1 808.9	1 116.6	3
Rental cost for machinery, equipment, and buildings	175.7	112.1	3
Capital expenditures, other than land	149.1	130.9	3
Gross book value of depreciable assets	1 540.3	1 122.7	2
AVERAGE PER EMPLOYEE			
Payroll, all employees	34.0	25.1	(Z)
Dollar value of business done	166.7	117.5	1
Value added††	70.4	51.2	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers	31.2	22.7	(Z)
Value of construction work	199.3	136.7	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees	47.5	38.1	(Z)
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees .....	.206	.217	(Z)
Cost of materials, components, supplies, and fuels .....	.323	.338	(Z)
Cost of construction work subcontracted out to others .....	.261	.236	1
Value of construction work subcontracted in from others .....	.122	.136	2
Rental cost for machinery, equipment, and buildings .....	.025	.024	1

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	42.0	34.0	199.3	.206	.323	.261	.122	.025
Alabama -----	50.7	21.3	146.3	.176	.401	.311	.177	.009
Alaska -----	29.5	51.3	301.9	.241	.568	.087	(D)	.030
Arizona -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Arkansas -----	16.3	19.9	134.7	.179	.307	.287	.124	.015
California -----	44.7	44.9	327.4	.171	.303	.397	.211	.036
Colorado -----	35.8	32.4	252.9	.158	(D)	.366	.173	.013
Connecticut -----	44.6	37.2	198.1	.238	.286	.216	.091	.051
Delaware -----	7.5	34.6	229.1	.218	(D)	(D)	.069	.016
District of Columbia -----	—	—	—	—	—	—	—	—
Florida -----	55.8	25.3	211.8	.144	.411	.342	.123	.039
Georgia -----	37.1	22.0	137.7	.200	.286	.230	.275	.008
Hawaii -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Idaho -----	25.0	28.8	150.4	.236	.404	.134	.013	.007
Illinois -----	59.4	41.8	212.9	.232	.240	.249	.055	.022
Indiana -----	70.7	41.0	191.5	.260	.438	.186	.035	.018
Iowa -----	28.0	23.4	108.7	.254	.571	.153	.099	.007
Kansas -----	51.8	25.7	131.9	.223	.413	.235	.181	.017
Kentucky -----	29.8	30.9	179.4	.202	.388	.223	.136	.018
Louisiana -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Maine -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Maryland -----	43.0	22.7	95.0	.280	.323	.185	.030	.024
Massachusetts -----	48.8	44.7	422.1	.140	.247	.347	.027	.015
Michigan -----	21.1	35.7	219.3	.200	.314	.302	.143	.011
Minnesota -----	77.9	33.1	197.5	.199	.398	(D)	.019	.046
Mississippi -----	81.5	21.9	139.5	.179	(D)	.308	.142	.025
Missouri -----	31.3	31.7	190.9	.203	.360	.172	.128	.022
Montana -----	22.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nebraska -----	10.5	32.6	293.2	.140	.277	.216	.113	.007
Nevada -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Hampshire -----	16.1	31.0	228.3	.189	.325	.358	.132	.031
New Jersey -----	45.2	45.7	200.6	.287	.323	.139	.074	.037
New Mexico -----	*18.1	(D)	157.2	(D)	.394	(D)	*.220	—
New York -----	44.1	43.5	219.8	.242	.247	.257	.065	.029
North Carolina -----	42.8	23.5	140.4	.196	.376	.261	.312	.051
North Dakota -----	45.5	29.3	158.8	.214	.347	.220	(D)	(D)
Ohio -----	30.1	35.8	215.2	.220	.334	.223	.158	.015
Oklahoma -----	23.7	25.8	153.9	.191	.408	.183	.180	.030
Oregon -----	36.1	37.6	283.5	.165	(D)	.339	.039	.059
Pennsylvania -----	44.8	29.4	168.4	.213	.260	.256	.229	.029
Rhode Island -----	34.3	(D)	228.0	(D)	(D)	.253	.199	.047
South Carolina -----	33.0	24.8	136.7	.219	.426	.177	.481	.030
South Dakota -----	12.7	(D)	125.1	(D)	(D)	(D)	(D)	(D)
Tennessee -----	48.5	25.0	161.7	.175	.359	.329	.137	.012
Texas -----	24.6	23.0	155.3	.179	.381	.144	.288	.033
Utah -----	15.8	26.0	186.0	.164	.209	.508	.282	.024
Vermont -----	19.8	22.5	106.9	.246	.336	.229	.152	.006
Virginia -----	33.5	26.2	151.5	.204	.329	.278	.147	.042
Washington -----	61.3	44.5	230.3	.267	.287	.192	.057	.029
West Virginia -----	23.3	40.8	230.4	.208	.360	.205	(S)	.022
Wisconsin -----	96.3	38.3	321.7	.137	(D)	.348	.071	.011
Wyoming -----	27.8	21.0	118.4	.217	.348	.248	.174	.025

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

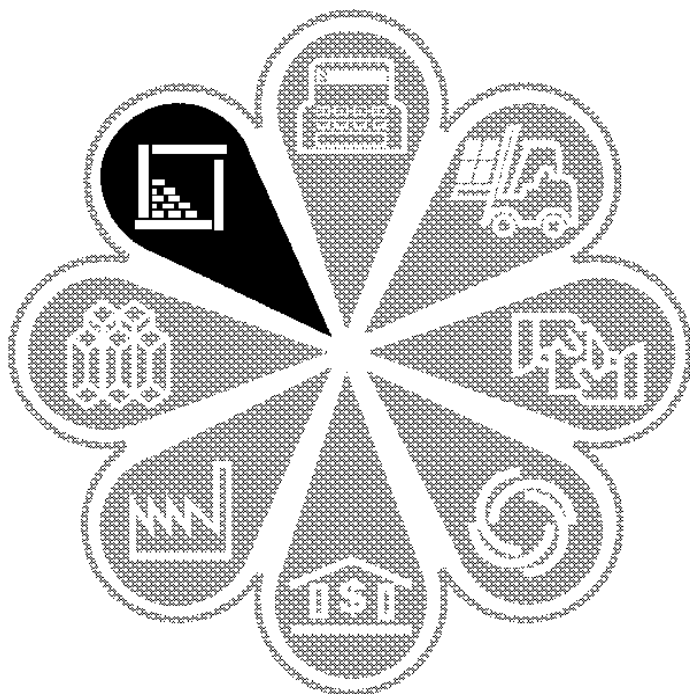
Census of Construction Industries

CC92-I-8

INDUSTRY SERIES

Water, Sewer, Pipeline, and Communications and Power Line Construction

Industry 1623



1992

Census of Construction Industries

CC92-I-8

INDUSTRY SERIES

Water, Sewer, Pipeline, and Communications and Power Line Construction

Industry 1623

Issued July 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year— buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Water, Sewer, Pipeline, and Communications and Power Line Construction

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appears as part of the number of each page]

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Summary of Findings

Establishments classified in this industry are primarily engaged in the construction of pipelines, communication and power lines, and sewer and water mains. It also includes construction of pumping stations, television and radio towers, cable laying, cable television line construction, and telephone lines. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$20.4 billion in total dollar value of business. Of this amount, \$20.2 billion were for the value of construction work. These establishments paid out \$5.5 billion for materials, components, and supplies and \$2.6 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$592 million. Value added for 1992 was \$11.7 billion.

There were 10,233 establishments with total employment averaging 194,252 during the year. Total payroll for 1992 was \$5.6 billion.

Larger establishments with 20 employees or more, while representing only 24 percent of the total number of employer establishments in this industry, accounted for 76 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992
1987

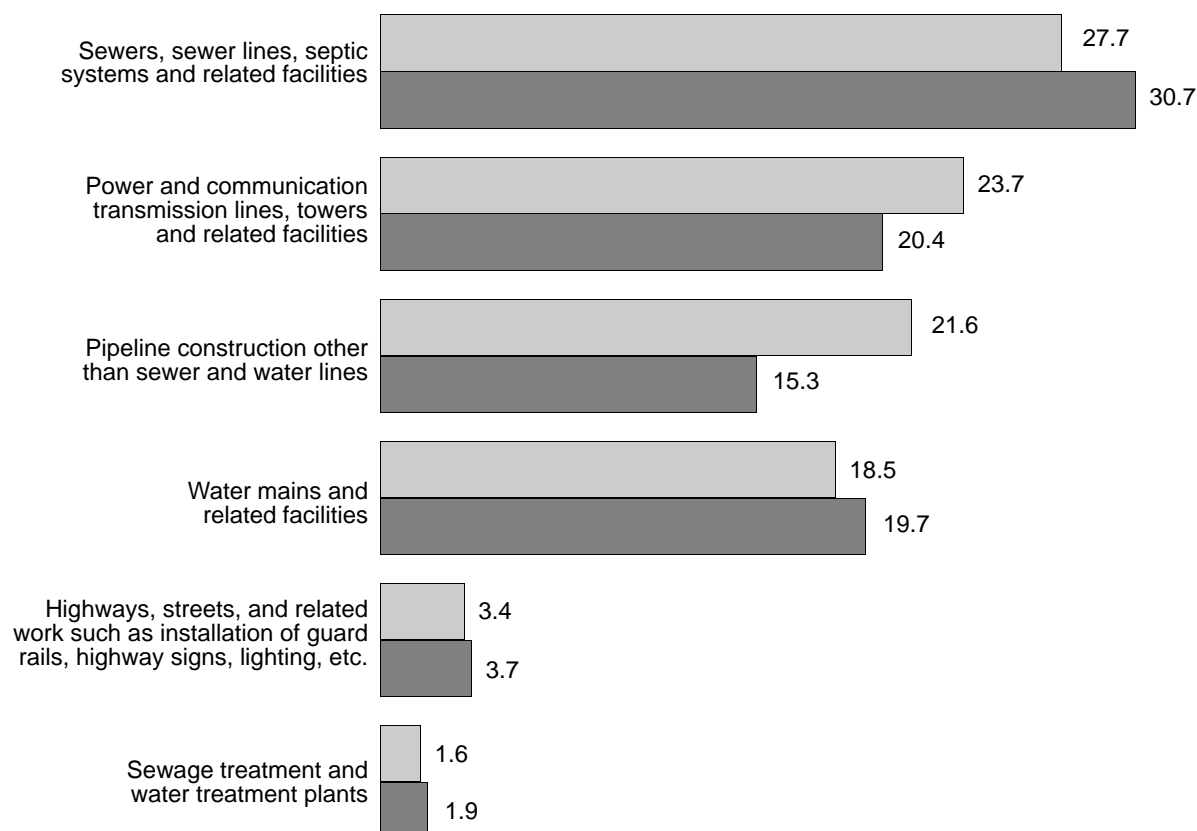


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992
1987

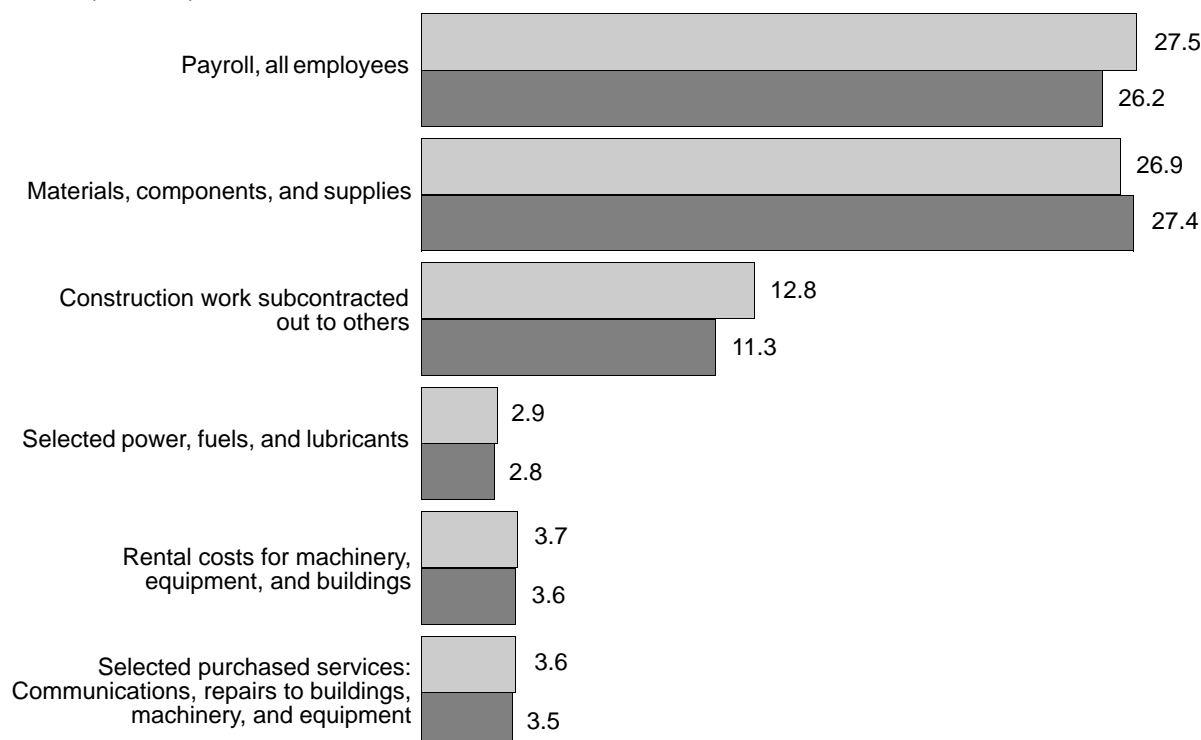


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	10 233	194 252	160 105	5 624 369	4 252 249	20 205 048	17 587 363	11 734 058	6 078 014
Alabama -----	167	3 082	2 554	63 870	45 806	264 735	226 169	134 470	96 746
Alaska -----	37	928	760	37 529	27 105	90 218	84 868	69 496	18 190
Arizona -----	150	3 222	2 596	97 439	70 678	277 210	259 396	183 186	80 278
Arkansas -----	158	1 748	1 434	35 171	27 097	124 232	110 159	73 093	38 538
California -----	999	17 666	14 358	602 630	451 583	2 296 243	2 011 366	1 289 149	743 007
Colorado -----	212	3 782	3 145	98 554	76 659	401 745	346 314	232 961	121 481
Connecticut -----	105	1 437	1 063	56 183	37 437	180 139	122 811	86 127	38 948
Delaware -----	21	1 348	1 143	48 414	38 391	125 057	109 600	78 345	31 372
District of Columbia -----	*6	164	143	*3 380	*2 704	*9 768	*8 249	4 489	*3 759
Florida -----	561	11 394	9 400	240 748	178 599	945 905	785 993	485 955	307 313
Georgia -----	352	6 077	4 935	136 427	102 783	546 358	483 214	285 575	204 540
Hawaii -----	23	565	460	23 127	15 848	91 978	73 091	51 684	22 477
Idaho -----	54	795	678	21 348	16 296	69 546	62 595	44 954	18 534
Illinois -----	369	7 401	6 091	277 275	218 916	963 444	817 951	581 041	249 059
Indiana -----	211	6 207	5 107	177 226	125 224	545 463	492 343	342 353	157 058
Iowa -----	105	1 110	927	33 202	25 519	132 853	115 291	89 268	28 739
Kansas -----	202	3 075	2 547	79 274	61 326	267 873	237 708	171 826	70 804
Kentucky -----	162	2 442	1 958	51 568	38 195	180 577	160 204	105 663	57 395
Louisiana -----	203	4 521	3 816	106 986	81 452	426 381	378 073	250 499	128 789
Maine -----	38	642	498	17 224	12 420	76 519	60 142	42 683	22 178
Maryland -----	155	4 669	3 904	122 000	90 665	369 847	331 023	213 993	120 499
Massachusetts -----	249	3 007	2 373	97 329	69 665	390 419	314 118	196 178	122 946
Michigan -----	363	6 034	4 954	197 119	146 809	739 506	641 658	413 037	236 517
Minnesota -----	204	2 963	2 447	90 605	67 483	389 497	326 100	202 809	128 406
Mississippi -----	98	2 151	1 869	48 379	39 442	171 646	151 275	93 778	57 726
Missouri -----	223	3 647	2 985	102 713	76 209	395 061	341 325	219 067	125 994
Montana -----	52	613	513	18 480	13 973	52 728	49 438	35 371	14 648
Nebraska -----	95	1 179	926	29 944	22 796	186 223	158 051	54 957	105 918
Nevada -----	53	1 165	939	39 246	30 428	142 783	128 278	81 442	47 693
New Hampshire -----	36	432	356	10 925	7 549	34 125	30 745	21 786	9 333
New Jersey -----	223	4 967	4 040	199 617	149 056	688 829	610 053	437 381	182 420
New Mexico -----	80	2 813	2 469	64 518	50 683	198 271	175 257	128 495	49 525
New York -----	455	7 766	6 193	269 170	206 139	922 895	815 585	597 590	233 792
North Carolina -----	423	7 707	6 402	183 928	138 133	643 172	551 599	361 668	194 646
North Dakota -----	49	576	487	15 110	11 750	69 060	58 256	32 419	26 610
Ohio -----	340	6 479	5 276	186 741	144 667	692 701	609 504	393 386	220 929
Oklahoma -----	216	3 456	2 850	115 030	88 234	340 756	292 327	228 901	65 562
Oregon -----	174	2 547	2 101	78 770	61 708	280 493	248 435	177 293	72 556
Pennsylvania -----	344	9 096	7 425	270 758	210 672	831 280	740 870	509 160	237 817
Rhode Island -----	24	426	340	12 786	10 241	52 138	45 177	31 849	13 424
South Carolina -----	187	2 788	2 347	58 300	44 983	211 453	183 697	109 676	77 234
South Dakota -----	55	719	608	21 493	14 645	70 965	60 787	39 081	25 896
Tennessee -----	191	3 273	2 780	68 830	53 208	296 554	258 409	147 021	111 649
Texas -----	792	16 874	14 133	511 062	393 951	1 946 019	1 690 410	1 160 954	545 081
Utah -----	81	1 523	1 220	36 245	28 005	131 398	117 992	70 541	51 252
Vermont -----	27	278	241	6 922	5 428	24 649	20 280	14 022	6 391
Virginia -----	292	8 438	7 199	203 119	156 625	636 711	558 734	381 968	179 277
Washington -----	275	4 516	3 644	156 683	113 067	578 885	486 728	334 498	166 447
West Virginia -----	89	1 782	1 470	55 868	38 561	154 245	144 719	115 886	31 430
Wisconsin -----	215	3 902	3 287	126 066	98 860	478 261	438 085	289 464	149 616
Wyoming -----	37	860	716	19 039	14 578	68 232	62 909	37 572	27 573

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
2 617 685	3 763 945	753 998	765 509	6 980 524	197 632	17 010 019	10 089 749	1	(Z)	2	U.S.
38 566	69 126	7 452	8 377	80 590	3 519	229 765	133 635	5	6	12	AL
5 350	8 820	4 601	9 995	66 690	969	138 542	84 069	2	2	3	AK
17 814	70 608	14 045	15 890	72 130	2 812	232 527	138 571	5	3	14	AZ
14 073	22 901	2 597	8 080	64 706	1 777	125 741	67 844	6	7	15	AR
284 877	580 060	89 011	61 608	617 380	19 119	2 101 952	1 238 137	2	1	5	CA
55 432	69 665	19 853	13 597	131 684	3 928	301 407	172 548	5	4	11	CO
57 327	19 874	3 679	2 944	96 365	2 303	214 898	139 151	5	4	10	CT
15 458	14 546	3 371	2 279	39 924	970	(D)	33 831	1	1	2	DE
*1 519	646	(S)	177	483	50	(D)	1 658	35	47	(Z)	DC
159 912	232 297	25 367	31 440	310 156	13 953	1 031 670	579 351	2	2	7	FL
63 144	87 526	13 940	19 347	181 507	7 813	846 225	508 280	3	3	13	GA
18 887	16 995	1 252	1 621	33 314	626	76 797	40 167	3	2	(Z)	HI
6 952	7 816	(S)	6 370	34 090	591	35 480	22 939	10	8	25	ID
145 494	162 380	26 007	36 430	336 948	5 715	657 443	353 466	3	2	8	IL
53 120	57 376	15 242	18 016	209 348	5 410	356 448	224 446	3	2	4	IN
17 562	35 081	5 351	*7 993	68 065	1 040	100 392	58 734	5	4	42	IA
30 165	48 088	9 569	13 723	93 112	1 904	156 902	82 979	4	3	7	KS
20 373	29 596	6 927	10 117	69 598	2 250	169 508	90 438	5	5	14	KY
48 308	26 817	18 649	13 119	105 419	4 035	273 229	166 885	5	4	12	LA
16 377	24 837	1 259	2 916	44 189	932	103 797	61 580	7	6	5	ME
38 824	117 889	10 165	8 632	153 771	4 568	320 870	187 047	3	2	12	MD
76 301	98 093	13 426	14 789	142 490	3 378	358 332	224 219	5	4	11	MA
97 848	145 705	23 959	36 881	326 045	4 811	505 274	282 096	3	3	12	MI
63 396	88 660	9 318	17 947	166 631	3 427	447 500	223 667	4	3	12	MN
20 371	17 167	5 731	5 165	47 919	2 583	142 412	88 670	5	6	15	MS
53 736	82 239	13 451	20 371	152 833	2 966	272 319	156 472	4	3	7	MO
3 289	*2 653	2 519	2 745	18 227	662	56 186	34 282	11	8	22	MT
28 172	32 389	5 674	6 025	40 568	1 388	75 620	34 900	10	8	21	NE
14 505	40 530	4 533	5 398	49 723	666	69 641	41 770	5	4	2	NV
3 380	8 432	561	1 283	20 352	776	64 422	40 062	13	13	31	NH
78 776	112 398	26 075	15 954	190 930	5 343	547 106	348 243	3	2	6	NJ
23 014	28 277	11 501	7 270	73 310	1 820	136 787	82 101	5	5	9	NM
107 310	161 456	30 995	21 759	249 488	6 771	682 317	445 462	2	2	17	NY
91 573	151 608	14 037	36 469	311 887	10 347	678 904	413 071	3	3	9	NC
10 804	11 125	3 123	3 028	29 004	397	29 751	17 308	10	12	25	ND
83 197	106 591	22 018	30 874	252 278	6 402	581 918	360 060	3	4	13	OH
48 430	60 260	18 874	14 764	136 702	3 097	224 745	164 829	4	4	9	OK
32 057	63 239	16 778	12 368	88 879	1 458	126 868	64 772	4	4	13	OR
90 410	152 498	28 558	36 738	315 953	8 888	695 293	474 065	4	2	6	PA
6 961	7 290	1 197	939	13 450	686	62 913	36 510	6	23	32	RI
27 756	66 539	5 336	6 949	86 896	3 170	184 473	114 204	5	5	20	SC
10 178	8 948	1 061	2 989	23 584	382	27 659	16 441	7	8	22	SD
38 145	24 644	5 125	9 868	101 638	4 424	372 000	203 684	4	5	14	TN
255 609	214 077	126 376	60 076	454 744	18 995	1 480 544	833 497	2	2	9	TX
13 407	18 453	8 458	9 549	49 795	1 321	108 597	62 338	8	7	36	UT
4 369	4 214	867	877	16 464	379	27 121	17 261	8	7	25	VT
77 977	138 277	20 657	27 365	332 806	9 849	677 443	412 314	2	2	6	VA
92 157	122 414	20 135	29 007	209 982	3 143	355 794	196 174	2	2	8	WA
9 526	7 386	5 477	5 920	63 812	1 769	100 584	77 029	3	2	10	WV
40 177	73 944	22 471	23 402	173 853	3 500	327 181	203 108	3	4	12	WI
5 322	11 497	3 198	6 069	30 813	528	57 373	35 387	11	8	39	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year -----	10 233	9 919	9 413	10 227	1	1	1	2
Proprietors and working partners -----	2 168	1 726	2 132	4 035	4	6	4	4
All employees** -----	194 252	197 632	186 674	198 354	1	1	(Z)	1
Construction workers:								
March -----	137 013	143 795	141 459	145 807	1	1	(Z)	1
May -----	159 812	166 855	164 683	173 244	1	1	(Z)	1
August -----	174 938	179 450	174 921	191 548	1	1	(Z)	1
November -----	168 658	173 426	157 412	181 368	1	1	1	1
Average -----	160 105	165 879	160 473	173 093	1	1	(Z)	1
Other employees:								
March -----	34 459	31 509	26 080	24 839	1	1	1	1
May -----	33 789	31 506	(NA)	(NA)	1	1	1	(NA)
August -----	34 353	32 047	(NA)	(NA)	1	1	1	(NA)
November -----	33 985	31 947	(NA)	(NA)	1	1	1	(NA)
Average -----	34 146	31 753	(NA)	(NA)	1	1	1	(NA)
Payroll, all employees -----	5 624 369	4 513 295	3 576 338	2 837 270	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers -----	4 252 249	3 427 722	2 906 789	2 347 495	(Z)	(Z)	(Z)	(Z)
Payroll, other employees -----	1 372 120	1 085 573	669 549	489 775	1	1	(Z)	(Z)
First-quarter payroll, all employees -----	1 128 019	920 498	737 855	523 281	1	1	(Z)	(Z)
Fringe benefits, all employees -----	1 519 661	1 035 877	634 002	580 131	1	1	(Z)	(Z)
Legally required expenditures -----	1 054 343	752 744	492 489	329 226	1	1	(Z)	(Z)
Voluntary expenditures -----	465 317	283 132	141 512	250 905	1	1	1	(Z)
Dollar value of business done -----	20 429 757	17 254 987	12 128 956	9 553 498	1	1	(Z)	(Z)
Value of construction work -----	20 205 048	17 010 019	11 952 831	9 361 092	1	1	(Z)	(Z)
Value of construction work subcontracted in from others -----	3 763 945	3 419 333	1 497 843	1 455 661	2	2	2	1
Other business receipts -----	224 709	244 968	176 125	192 406	2	2	1	1
Net value of construction work† -----	17 587 363	15 055 297	10 462 441	8 371 028	(Z)	1	(Z)	(Z)
Value added†† -----	11 734 058	10 089 749	7 005 322	5 522 719	(Z)	1	(Z)	(Z)
Selected costs -----	8 695 699	7 165 237	5 123 633	4 030 779	1	1	1	(Z)
Materials, components, and supplies -----	5 486 059	4 734 144	3 189 912	2 798 430	1	1	1	(Z)
Construction work subcontracted out to others -----	2 617 685	1 954 721	1 490 389	990 064	1	1	1	(Z)
Selected power, fuels, and lubricants -----	591 955	476 371	443 331	242 285	1	1	1	1
Electricity -----	46 488	32 128	27 432	15 966	2	1	1	1
Natural and manufactured gas -----	10 540	7 666	7 559	6 316	2	3	2	2
Gasoline and diesel fuel -----	492 050	400 312	382 139	192 902	1	1	1	1
On highway use -----	256 447	209 814	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use -----	235 603	190 498	(NA)	(NA)	1	1	(NA)	(NA)
Other, including lubricating oils and greases -----	42 876	36 264	26 200	27 119	2	1	1	1
Rental cost for machinery, equipment, and buildings -----	753 998	625 417	458 027	364 617	1	1	1	1
For machinery and equipment -----	652 119	557 613	409 955	343 490	2	1	1	1
For buildings -----	101 879	67 804	48 072	21 126	1	2	1	1
Selected purchased services -----	729 151	596 515	461 655	356 533	1	1	1	1
Communication services -----	108 278	61 144	46 741	29 195	2	1	1	1
Repairs to buildings and other structures -----	29 244	17 192	12 677	9 394	4	3	2	3
Repairs to machinery and equipment -----	591 629	518 178	402 236	317 944	1	1	1	1
Ownership of construction projects:								
Value of construction work -----	20 205 048	17 010 019	11 952 831	9 361 092	1	1	(Z)	(Z)
Government owned -----	7 997 394	6 290 814	4 468 103	4 068 001	1	1	1	1
Federal -----	980 974	972 755	(NA)	(NA)	5	3	(NA)	(NA)
State and local -----	7 016 420	5 318 059	(NA)	(NA)	2	1	(NA)	(NA)
Privately owned -----	12 207 654	10 719 204	7 484 727	5 293 091	1	1	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item			Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets	6 644 859	4 595 077	1	1
Capital expenditures, other than land	765 509	695 713	2	2
New	552 828	557 809	2	2
Used	212 682	137 903	4	3
Retirements and disposition of depreciable assets.....	429 844	297 541	3	4
End-of-year gross book value of depreciable assets	6 980 524	4 993 249	1	1
Depreciation charges during year	748 881	628 401	1	1
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets	488 794	416 692	3	2
Capital expenditures, other than land	34 852	62 300	4	3
New buildings and other structures	25 615	49 080	4	3
Used buildings and other structures	9 237	13 219	7	8
Retirements and disposition of depreciable assets.....	11 043	24 736	10	8
End-of-year gross book value of depreciable assets	512 602	454 256	3	2
Depreciation charges during year	40 566	54 675	4	3
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets	6 156 065	4 178 385	1	1
Capital expenditures, other than land	730 658	633 412	2	2
New machinery and equipment, including automobiles and trucks	527 213	508 728	2	2
New automobiles and trucks, intended primarily for highway use	159 085	174 039	3	2
Used machinery and equipment, including automobiles and trucks	203 445	124 683	4	3
Retirements and disposition of depreciable assets.....	418 801	272 805	3	4
End-of-year gross book value of depreciable assets	6 467 922	4 538 992	1	1
Depreciation charges during year	708 315	573 726	1	1

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	10 233	1
Value of construction work	20 205 048	1
Establishments with inventories:		
Number	2 497	2
Value of construction work	7 367 949	1
Inventories ¹ :		
End of 1992, materials and supplies	126 146	2
End of 1991, materials and supplies	117 429	3
Establishments with no inventories:		
Number	4 513	2
Value of construction work	9 075 822	1
Establishments not reporting:		
Number	3 223	2
Value of construction work	3 761 276	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—									
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more	
1992											
Number of establishments -----	10 233	3 459	2 319	2 011	1 619	523	239	48	13	1	
All employees** -----	194 252	7 139	15 280	26 693	48 542	35 423	34 952	16 360	9 863	(D)	
Payroll, all employees -----	5 624 369	131 783	349 013	681 899	1 372 190	1 038 756	1 079 227	636 731	334 770	(D)	
Dollar value of business done -----	20 429 757	706 592	1 449 907	2 659 515	5 316 207	3 691 727	3 764 668	1 957 510	883 632	(D)	
Value of construction work -----	20 205 048	699 478	1 437 541	2 636 901	5 261 338	3 642 016	3 703 654	1 945 539	878 581	(D)	
Net value of construction work† -----	17 587 363	624 371	1 274 584	2 326 186	4 525 566	3 141 273	3 151 738	1 723 158	820 487	(D)	
Value added†† -----	11 734 058	407 155	783 263	1 443 836	2 757 535	2 053 583	2 156 458	1 453 061	679 167	(D)	
Cost of materials, components, supplies, and fuels -----	6 078 014	224 330	503 687	904 963	1 822 899	1 137 401	1 056 294	282 068	146 371	(D)	
Cost of construction work subcontracted out to others -----	2 617 685	75 107	162 957	310 715	735 772	500 743	551 916	222 381	58 094	(D)	
Rental cost for machinery, equipment, and buildings -----	753 998	20 947	58 542	76 917	190 583	131 275	139 637	111 864	24 234	(D)	
Capital expenditures, other than land -----	765 509	41 780	61 074	101 696	197 172	136 924	133 042	64 437	29 384	(D)	
End-of-year gross book value of depreciable assets -----	6 980 524	343 703	609 633	923 133	1 839 468	1 216 158	1 260 586	456 280	331 562	(D)	
1987											
All employees** -----	197 632	(S)	15 223	27 250	50 720	33 558	31 526	16 575	8 928	7 088	
Value of construction work -----	17 010 019	(S)	1 218 347	2 451 301	4 710 458	3 007 551	2 792 680	1 214 780	1 091 951	(D)	
Value added†† -----	10 089 749	(S)	699 203	1 430 189	2 666 898	1 743 044	1 652 882	838 111	452 534	301 796	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	4	4	3	1	(Z)	(Z)	(Z)	(Z)	(D)	
Net value of construction work† -----	(Z)	6	4	3	1	(Z)	(Z)	(Z)	(Z)	(D)	
Capital expenditures, other than land -----	2	13	11	7	3	1	(Z)	(Z)	(Z)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	10 233	(S)	301	(S)	1 620	1 736	1 677	1 965	980	544	351
All employees** -----	194 252	(S)	350	(S)	5 188	10 680	16 032	34 184	34 373	32 932	58 979
Payroll, all employees -----	5 624 369	(S)	3 393	(S)	77 419	194 047	354 601	864 013	948 737	996 112	2 170 292
Dollar value of business done -----	20 429 757	(S)	11 316	(S)	277 715	634 181	1 194 583	3 020 091	3 489 028	3 772 211	7 973 966
Value of construction work -----	20 205 048	(S)	11 280	(S)	274 194	625 240	1 184 109	2 985 826	3 457 383	3 723 217	7 887 919
Net value of construction work† -----	17 587 363	(S)	10 745	(S)	258 129	574 193	1 091 839	2 681 739	3 023 310	3 207 515	6 686 744
Value added†† -----	11 734 058	(S)	7 339	(S)	173 118	392 478	710 953	1 729 049	1 874 160	2 024 024	4 787 315
Cost of materials, components, supplies, and fuels -----	6 078 014	(S)	3 442	(S)	88 532	190 656	391 361	986 956	1 180 795	1 232 485	1 985 476
Cost of construction work subcontracted out to others -----	2 617 685	(S)	535	(S)	16 065	51 047	92 270	304 087	434 072	515 702	1 201 175
Rental cost for machinery, equipment, and buildings -----	753 998	(S)	245	(S)	9 866	25 899	46 017	95 171	119 696	147 137	308 195
Capital expenditures, other than land -----	765 509	(S)	(S)	(S)	17 631	43 050	49 153	131 123	143 096	135 175	244 090
End-of-year gross book value of depreciable assets -----	6 980 524	(S)	*4 549	(S)	146 056	316 375	588 714	1 208 247	1 288 656	1 213 806	2 189 585
1987											
All employees** -----	197 632	(S)	(S)	(S)	6 496	11 417	18 338	36 808	36 827	28 791	56 552
Value of construction work -----	17 010 019	(S)	(S)	(S)	281 462	602 781	1 148 538	2 864 154	3 350 312	3 038 635	5 655 580
Value added†† -----	10 089 749	(S)	(S)	(S)	185 583	399 180	717 008	1 688 410	1 955 721	1 703 250	3 396 889
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	17	(S)	6	5	4	2	1	(Z)	(Z)
Net value of construction work† -----	(Z)	(S)	12	(S)	6	5	4	3	1	1	(Z)
Capital expenditures, other than land -----	2	(S)	(S)	(S)	16	11	11	6	4	2	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	20 205 048	14 438 540	3 097 742	2 657 337	1	1	1	1
Building construction	274 199	190 557	48 564	35 078	3	3	6	3
Nonbuilding construction	19 919 421	14 247 983	3 049 178	2 622 260	1	1	1	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	695 683	440 692	175 458	79 533	1	2	2	2
Bridges, tunnels, and elevated highways	154 895	85 985	49 037	19 873	1	1	3	5
Power and communication transmission lines, towers, and related facilities	4 786 135	3 004 735	738 106	1 043 294	1	1	1	1
Sewers, water mains, and related facilities	9 345 016	7 240 928	1 368 731	735 357	1	1	2	3
Sewers, sewer lines, septic systems, and related facilities	5 598 795	4 323 043	835 339	440 413	1	1	2	4
Water mains and related facilities	3 746 221	2 917 885	533 392	294 944	1	1	2	3
Pipeline construction other than sewer or water lines	4 363 692	3 077 640	606 217	679 835	1	1	1	2
Sewage treatment and water treatment plants	320 748	246 221	54 238	20 288	2	1	5	4
Sewage treatment plants	166 764	122 452	36 313	7 999	3	3	6	11
Water treatment plants	153 984	123 769	17 925	12 290	1	1	5	2
Other nonbuilding construction	253 252	151 781	57 391	44 080	2	2	3	6
Construction work, n.s.k.	11 428	(NA)	(NA)	(NA)	11	(NA)	(NA)	(NA)
1987								
Value of construction work	17 010 019	12 838 852	2 182 059	1 569 178	1	1	1	1
Building construction	353 154	313 343	28 843	10 968	5	5	6	12
Nonbuilding construction	16 236 941	12 525 514	2 153 216	1 558 210	1	1	1	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	633 580	448 506	133 629	51 445	1	1	1	2
Bridges, tunnels, and elevated highways	127 899	81 914	27 276	18 708	2	3	5	4
Power and communication transmission lines, towers, and related facilities	3 473 127	2 456 175	501 621	515 331	1	1	2	1
Sewers, water mains, and related facilities	8 571 756	7 059 798	969 607	542 350	1	1	2	2
Sewers, sewer lines, septic systems, and related facilities	5 213 772	4 293 077	588 749	331 945	1	1	2	2
Water mains and related facilities	3 357 984	2 766 720	380 857	210 405	1	1	2	3
Pipeline construction other than sewer or water lines	2 598 987	1 851 459	393 416	354 111	1	1	2	3
Sewage treatment and water treatment plants	329 366	266 187	47 266	15 912	2	2	4	3
Sewage treatment plants	209 733	175 816	26 072	7 845	2	2	4	3
Water treatment plants	119 632	90 371	21 194	8 067	4	3	6	6
Other nonbuilding construction	502 226	361 475	80 401	60 353	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	419 924	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
All establishments -----	10 233	194 252	5 624 369	20 205 048	13 806 668	17 587 363	11 734 058	2 617 685	1	1	1
Establishments not specializing by type -----	1 776	36 817	1 053 517	4 505 700	(NA)	3 820 965	2 307 116	684 735	1	1	1
Establishments specializing 51 percent or more -----	8 457	157 435	4 570 852	15 699 348	13 806 668	13 766 398	9 426 943	1 932 950	1	1	1
POWER AND COMMUNICATION TRANSMISSION LINES, TOWERS, AND RELATED FACILITIES											
All establishments specializing in type -----	2 965	62 602	1 608 036	4 828 661	4 624 898	4 247 931	3 180 495	580 730	1	1	2
Establishments with —											
100 percent specialization -----	2 692	54 247	1 355 886	4 046 570	4 046 570	3 616 556	2 720 977	430 014	1	1	3
90 to 99 percent specialization -----	54	2 612	81 526	214 711	199 914	185 514	139 102	29 196	3	2	1
80 to 89 percent specialization -----	62	1 797	49 570	143 772	117 966	128 434	95 451	15 338	3	3	1
70 to 79 percent specialization -----	64	991	28 957	101 336	73 389	84 654	53 308	16 682	10	6	2
60 to 69 percent specialization -----	61	1 578	45 067	156 092	97 573	134 670	103 466	21 422	5	6	17
51 to 59 percent specialization -----	32	1 378	47 029	166 180	89 486	98 102	68 191	68 078	6	3	(Z)
SEWERS, SEWER LINES, SEPTIC SYSTEMS, AND RELATED FACILITIES											
All establishments specializing in type -----	2 863	37 429	1 073 904	4 675 621	3 653 217	3 942 989	2 232 449	732 632	2	1	2
Establishments with —											
100 percent specialization -----	1 354	11 741	326 979	1 439 779	1 439 779	1 255 151	740 691	184 629	3	3	3
90 to 99 percent specialization -----	199	2 448	70 425	302 311	280 407	241 048	143 827	61 263	5	6	4
80 to 89 percent specialization -----	235	3 302	101 910	426 890	350 833	362 805	202 273	64 085	4	3	3
70 to 79 percent specialization -----	357	5 861	166 077	712 388	520 238	616 848	320 865	95 540	4	4	6
60 to 69 percent specialization -----	439	8 997	262 094	1 171 749	729 421	981 348	539 980	190 401	3	3	6
51 to 59 percent specialization -----	279	5 080	146 419	622 504	332 540	485 789	284 813	136 715	4	3	3
WATER MAINS AND RELATED FACILITIES											
All establishments specializing in type -----	1 460	17 790	485 038	2 082 283	1 600 792	1 841 592	1 019 659	240 690	3	2	3
Establishments with —											
100 percent specialization -----	580	5 338	131 532	579 706	579 706	525 178	318 580	54 528	6	4	7
90 to 99 percent specialization -----	130	1 106	32 697	117 176	109 131	100 023	57 141	17 153	11	9	17
80 to 89 percent specialization -----	163	1 449	40 770	155 095	126 895	135 536	82 366	19 559	9	9	13
70 to 79 percent specialization -----	253	3 450	100 111	448 882	324 997	395 664	193 622	53 217	6	5	3
60 to 69 percent specialization -----	225	4 089	114 864	489 359	303 567	441 193	226 733	48 167	5	5	11
51 to 59 percent specialization -----	109	2 357	65 064	292 065	156 496	243 999	141 219	48 066	9	6	5
PIPELINE CONSTRUCTION OTHER THAN SEWER OR WATER LINES											
All establishments specializing in type -----	1 022	39 403	1 400 267	4 103 081	3 918 058	3 724 827	2 987 835	378 253	1	1	5
Establishments with —											
100 percent specialization -----	794	30 568	1 109 686	3 194 864	3 194 864	2 905 147	2 376 507	289 717	1	1	6
90 to 99 percent specialization -----	46	2 876	85 429	284 841	266 227	263 180	188 938	21 661	1	2	1
80 to 89 percent specialization -----	78	2 226	80 351	261 029	223 431	237 894	196 128	23 135	3	4	4
70 to 79 percent specialization -----	50	1 450	46 908	138 794	98 888	123 470	89 027	15 324	5	4	7
60 to 69 percent specialization -----	24	1 291	49 364	136 838	87 924	120 957	90 641	15 881	2	2	3
51 to 59 percent specialization -----	30	993	28 529	86 715	46 723	74 179	46 593	12 536	8	7	19

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	10 233	160 105	137 013	159 812	174 938	168 658	1	1	1	1	1	1
Alabama	167	2 554	2 505	2 624	2 581	2 505	10	5	4	4	5	5
Alaska	37	760	684	719	898	1 048	10	2	2	2	2	2
Arizona	150	2 596	1 877	2 544	3 066	2 896	11	5	5	5	5	4
Arkansas	158	1 434	1 285	1 378	1 571	1 502	12	6	7	6	6	6
California	999	14 358	12 837	14 262	15 424	14 909	4	2	2	2	2	2
Colorado	212	3 145	2 335	3 182	3 576	3 489	10	4	4	4	5	5
Connecticut	105	1 063	942	1 118	1 149	1 044	7	5	5	5	5	5
Delaware	21	1 143	1 193	1 085	1 138	1 157	8	1	1	1	1	1
District of Columbia	*6	143	109	119	*184	*159	41	35	22	26	42	42
Florida	561	9 400	9 076	9 273	9 565	9 685	5	2	2	2	2	2
Georgia	352	4 935	4 593	4 629	5 140	5 377	8	3	4	4	3	3
Hawaii	23	460	428	460	476	478	11	2	2	2	2	1
Idaho	54	678	501	724	779	706	19	9	9	9	11	11
Illinois	369	6 091	4 612	6 306	6 928	6 519	8	3	2	3	3	3
Indiana	211	5 107	4 420	5 306	5 256	5 447	11	3	2	2	3	3
Iowa	105	927	583	1 032	1 166	925	13	5	8	5	4	6
Kansas	202	2 547	2 486	2 604	2 579	2 521	11	5	5	6	5	4
Kentucky	162	1 958	1 890	1 886	1 972	2 083	11	5	7	5	4	5
Louisiana	203	3 816	3 413	3 720	4 228	3 902	14	5	5	5	5	5
Maine	38	498	331	519	598	544	24	7	8	7	9	9
Maryland	155	3 904	3 784	3 822	4 033	3 975	8	3	3	3	3	3
Massachusetts	249	2 373	1 640	2 472	2 707	2 675	9	5	6	5	4	6
Michigan	363	4 954	3 321	5 106	5 812	5 577	8	3	4	3	3	3
Minnesota	204	2 447	1 221	2 788	3 280	2 500	9	4	5	4	4	4
Mississippi	98	1 869	1 288	1 462	2 145	2 581	13	4	6	5	3	4
Missouri	223	2 985	2 784	3 035	3 182	2 939	9	4	4	4	5	4
Montana	52	513	410	497	563	583	21	12	18	10	10	11
Nebraska	95	926	747	987	1 084	888	19	11	12	11	11	12
Nevada	53	939	895	959	1 006	895	18	4	4	4	5	3
New Hampshire	36	356	257	353	397	416	16	13	13	13	13	12
New Jersey	223	4 040	3 580	3 943	4 417	4 219	8	3	3	3	3	3
New Mexico	80	2 469	2 036	2 494	2 811	2 536	18	4	5	6	5	4
New York	455	6 193	5 340	6 403	6 901	6 127	7	2	2	2	2	2
North Carolina	423	6 402	6 212	6 159	6 470	6 766	8	3	3	3	4	3
North Dakota	49	487	262	508	717	462	23	10	12	12	9	10
Ohio	340	5 276	4 273	5 379	5 935	5 517	8	3	2	3	3	3
Oklahoma	216	2 850	2 248	2 772	3 653	2 727	10	4	5	5	3	5
Oregon	174	2 101	1 862	1 974	2 361	2 208	10	4	4	4	5	4
Pennsylvania	344	7 425	5 696	7 551	7 933	8 520	8	4	4	4	4	5
Rhode Island	24	340	246	351	394	370	14	5	4	5	4	6
South Carolina	187	2 347	2 415	2 309	2 380	2 282	12	5	5	5	6	6
South Dakota	55	608	412	650	732	640	21	7	8	7	7	6
Tennessee	191	2 780	2 666	2 811	2 939	2 706	10	4	4	4	5	4
Texas	792	14 133	12 966	13 876	15 494	14 195	5	2	2	2	2	2
Utah	81	1 220	920	1 206	1 413	1 343	14	7	7	6	7	8
Vermont	27	241	86	238	317	323	24	9	4	6	12	11
Virginia	292	7 199	6 401	7 163	7 512	7 721	8	2	2	2	2	2
Washington	275	3 644	3 191	3 571	3 791	4 022	10	2	2	3	2	2
West Virginia	89	1 470	1 229	1 379	1 593	1 679	15	3	3	3	3	5
Wisconsin	215	3 287	1 928	3 446	3 937	3 837	11	3	3	3	3	3
Wyoming	37	716	598	660	758	848	23	12	14	10	11	12

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	20 205 048	10 093	16 382 240	2 868	3 822 807	17 010 019	18.8	1	1	1
Alabama-----	317 717	150	220 479	63	97 238	287 242	10.6	6	6	13
Alaska -----	111 681	34	(D)	9	(D)	169 446	-34.1	1	(D)	(D)
Arizona -----	314 011	148	186 528	38	127 482	279 157	12.5	3	5	(Z)
Arkansas -----	174 914	156	108 823	56	66 091	153 762	13.8	5	7	4
California -----	2 375 657	996	2 145 607	67	230 049	2 139 275	11.0	1	1	1
Colorado -----	356 293	211	308 800	48	47 493	268 889	32.5	4	5	3
Connecticut -----	167 517	102	123 478	38	44 039	217 614	-23.0	3	4	1
Delaware -----	68 021	21	62 076	21	5 945	40 097	69.6	(Z)	(Z)	5
District of Columbia -----	22 818	*6	(D)	31	(D)	23 831	-4.3	8	(D)	(D)
Florida -----	1 048 094	548	900 000	92	148 094	1 220 799	-14.1	2	2	3
Georgia -----	499 901	351	413 921	90	85 980	621 108	-19.5	4	4	4
Hawaii -----	109 153	23	91 978	12	17 175	94 703	15.3	1	2	4
Idaho -----	132 135	53	(S)	41	76 560	36 957	257.5	4	(S)	2
Illinois -----	892 631	368	787 940	99	104 691	643 112	38.8	2	2	1
Indiana -----	317 594	207	263 215	57	54 379	317 542	(Z)	4	4	13
Iowa -----	215 009	105	120 275	99	94 734	106 758	101.4	3	5	3
Kansas -----	254 530	197	177 287	65	77 243	165 951	53.4	3	4	2
Kentucky -----	300 387	158	164 728	87	135 659	197 565	52.0	3	6	2
Louisiana -----	384 237	202	326 611	69	57 626	348 156	10.4	4	5	1
Maine -----	82 892	38	75 551	16	7 341	82 415	.6	5	5	16
Maryland -----	418 406	155	316 522	98	101 884	348 547	20.0	2	2	5
Massachusetts -----	403 006	248	340 881	36	62 125	396 223	1.7	3	3	1
Michigan -----	796 899	361	654 505	65	142 394	496 274	60.6	3	4	1
Minnesota -----	365 347	191	299 911	55	65 436	407 273	-10.3	3	4	4
Mississippi -----	181 984	97	149 967	49	32 017	117 110	55.4	6	7	16
Missouri -----	380 801	220	280 862	92	99 939	233 578	63.0	3	4	3
Montana -----	57 296	52	46 783	22	10 513	51 692	10.8	6	7	4
Nebraska -----	136 006	94	97 865	51	38 141	81 815	66.2	10	13	3
Nevada -----	180 187	53	129 885	24	50 302	114 498	57.4	3	5	(Z)
New Hampshire -----	42 630	32	21 999	34	20 631	85 256	-50.0	21	19	39
New Jersey -----	632 424	222	529 634	62	102 790	479 887	31.8	3	3	5
New Mexico -----	212 957	80	168 465	33	44 492	145 670	46.2	4	5	5
New York -----	1 034 949	452	855 554	69	179 396	741 571	39.6	2	2	1
North Carolina -----	614 480	422	535 386	98	79 094	621 403	-1.1	3	3	3
North Dakota -----	79 304	49	55 916	36	23 388	32 644	142.9	8	11	11
Ohio -----	655 325	336	559 240	75	96 085	518 326	26.4	4	5	(Z)
Oklahoma -----	178 116	204	144 681	81	33 435	134 091	32.8	6	7	4
Oregon -----	390 436	173	223 200	55	167 236	122 500	218.7	3	4	2
Pennsylvania -----	806 266	338	650 151	67	156 114	701 658	14.9	2	3	1
Rhode Island -----	66 552	24	38 842	21	27 711	47 125	41.2	16	28	1
South Carolina -----	240 942	179	175 461	88	65 482	209 081	15.2	4	6	3
South Dakota -----	67 352	55	47 684	45	19 667	38 388	75.5	10	13	11
Tennessee -----	304 077	188	234 872	78	69 204	365 445	-16.8	3	4	2
Texas -----	1 675 586	790	1 548 885	71	126 701	1 450 355	15.5	3	3	3
Utah -----	119 558	81	101 052	30	18 507	89 272	33.9	8	9	7
Vermont -----	24 762	27	22 887	21	1 875	19 604	26.3	8	9	14
Virginia -----	711 006	290	541 103	97	169 903	699 816	1.6	2	2	2
Washington -----	589 586	273	460 198	70	129 388	323 047	82.5	2	3	1
West Virginia -----	142 465	88	83 460	48	59 005	119 978	18.7	2	3	1
Wisconsin -----	476 707	207	393 429	71	83 278	346 940	37.4	4	5	1
Wyoming -----	74 442	37	47 771	30	26 671	56 547	31.6	7	11	6

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	20 429 757	17 254 987	1	1
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS				
Cable laying contractor	3 222 058	1 528 641	1	2
Excavating, earthmoving, and land clearing contractor, not connected with buildings	161 414	492 719	3	2
Heavy construction contractor	15 678 547	13 409 108	1	1
Highway and street general contractor	492 356	536 077	2	1
Paving contractor	214 822	135 464	2	3
Other construction activities	446 643	654 223	2	(NA)
Other business activities	204 087	253 468	2	(NA)
Kind of business activity, n.s.k.	9 829	245 287	11	6

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	19.0	19.9	1
Number of construction workers	15.6	16.7	1
Number of all other employees	3.3	3.2	1
Payroll, all employees	549.6	455.0	1
Payroll, construction workers	415.5	345.6	1
Payroll, other employees	134.1	109.4	1
Dollar value of business done	1 996.5	1 739.6	1
Value of construction work	1 974.5	1 714.9	1
Cost of materials, components, supplies, and fuels	594.0	525.3	1
Construction work subcontracted to others	255.8	197.1	2
Rental cost for machinery, equipment, and buildings	73.7	63.1	2
Capital expenditures, other than land	74.8	70.1	2
Gross book value of depreciable assets	682.2	503.4	2
AVERAGE PER EMPLOYEE			
Payroll, all employees	29.0	22.8	(Z)
Dollar value of business done	105.2	87.3	(Z)
Value added††	60.4	51.1	(Z)
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers	26.6	20.7	(Z)
Value of construction work	126.2	102.5	(Z)
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees	40.2	34.2	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees .....	.278	.265	(Z)
Cost of materials, components, supplies, and fuels .....	.301	.306	(Z)
Cost of construction work subcontracted out to others .....	.130	.115	1
Value of construction work subcontracted in from others .....	.186	.201	2
Rental cost for machinery, equipment, and buildings .....	.037	.037	1

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	19.0	29.0	126.2	.278	.301	.130	.186	.037
Alabama -----	18.5	20.7	103.7	.241	.365	.146	.261	.028
Alaska -----	25.3	40.4	118.7	.416	.202	.059	.098	.051
Arizona -----	21.5	30.2	106.8	.351	.290	.064	.255	.051
Arkansas -----	11.0	20.1	86.6	.283	.310	.113	.184	.021
California -----	17.7	34.1	159.9	.262	.324	.124	.253	.039
Colorado -----	17.8	26.1	127.7	.245	.302	.138	.173	.049
Connecticut -----	13.7	39.1	169.5	.312	.216	.318	.110	.020
Delaware -----	63.7	35.9	109.4	.387	.251	.124	.116	.027
District of Columbia -----	28.0	20.6	68.3	.346	.385	.156	*.066	(S)
Florida -----	20.3	21.1	100.6	.255	.325	.169	.246	.027
Georgia -----	17.3	22.5	110.7	.250	.374	.116	.160	.026
Hawaii -----	24.3	40.9	200.0	.251	.244	.205	.185	.014
Idaho -----	14.8	26.9	102.6	.307	.266	.100	.112	(S)
Illinois -----	20.0	37.5	158.2	.288	.259	.151	.169	.027
Indiana -----	29.4	28.6	106.8	.325	.288	.097	.105	.028
Iowa -----	10.5	29.9	143.3	.250	.216	.132	.264	.040
Kansas -----	15.2	25.8	105.2	.296	.264	.113	.180	.036
Kentucky -----	15.0	21.1	92.2	.286	.318	.113	.164	.038
Louisiana -----	22.3	23.7	111.7	.251	.302	.113	.063	.044
Maine -----	16.9	26.8	153.7	.225	.290	.214	.325	.016
Maryland -----	30.1	26.1	94.7	.330	.326	.105	.319	.027
Massachusetts -----	12.1	32.4	164.5	.249	.315	.195	.251	.034
Michigan -----	16.6	32.7	149.3	.267	.320	.132	.197	.032
Minnesota -----	14.6	30.6	159.2	.233	.330	.163	.228	.024
Mississippi -----	21.9	22.5	91.8	.282	.336	.119	.100	.033
Missouri -----	16.3	28.2	132.3	.260	.319	.136	.208	.034
Montana -----	11.7	30.1	102.8	.350	.278	.062	*.050	.048
Nebraska -----	12.4	25.4	201.1	.161	.569	.151	.174	.030
Nevada -----	22.1	33.7	152.1	.275	.334	.102	.284	.032
New Hampshire -----	11.9	25.3	95.9	.320	.273	.099	.247	.016
New Jersey -----	22.3	40.2	170.5	.290	.265	.114	.163	.038
New Mexico -----	35.3	22.9	80.3	.325	.250	.116	.143	.058
New York -----	17.1	34.7	149.0	.292	.253	.116	.175	.034
North Carolina -----	18.2	23.9	100.5	.286	.303	.142	.236	.022
North Dakota -----	11.7	26.2	141.8	.219	.385	.156	.161	.045
Ohio -----	19.0	28.8	131.3	.270	.319	.120	.154	.032
Oklahoma -----	16.0	33.3	119.6	.338	.192	.142	.177	.055
Oregon -----	14.6	30.9	133.5	.281	.259	.114	.225	.060
Pennsylvania -----	26.5	29.8	112.0	.326	.286	.109	.183	.034
Rhode Island -----	17.5	30.0	153.3	.245	.257	.134	.140	.023
South Carolina -----	14.9	20.9	90.1	.276	.365	.131	.315	.025
South Dakota -----	13.1	29.9	116.7	.303	.365	.143	.126	.015
Tennessee -----	17.1	21.0	106.7	.232	.376	.129	.083	.017
Texas -----	21.3	30.3	137.7	.263	.280	.131	.110	.065
Utah -----	18.9	23.8	107.7	.276	.390	.102	.140	.064
Vermont -----	10.4	24.9	102.3	.281	.259	.177	.171	.035
Virginia -----	28.9	24.1	88.4	.319	.282	.122	.217	.032
Washington -----	16.4	34.7	158.9	.271	.288	.159	.211	.035
West Virginia -----	20.0	31.4	104.9	.362	.204	.062	.048	.036
Wisconsin -----	18.2	32.3	145.5	.264	.313	.084	.155	.047
Wyoming -----	23.0	22.1	95.3	.279	.404	.078	.169	.047

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

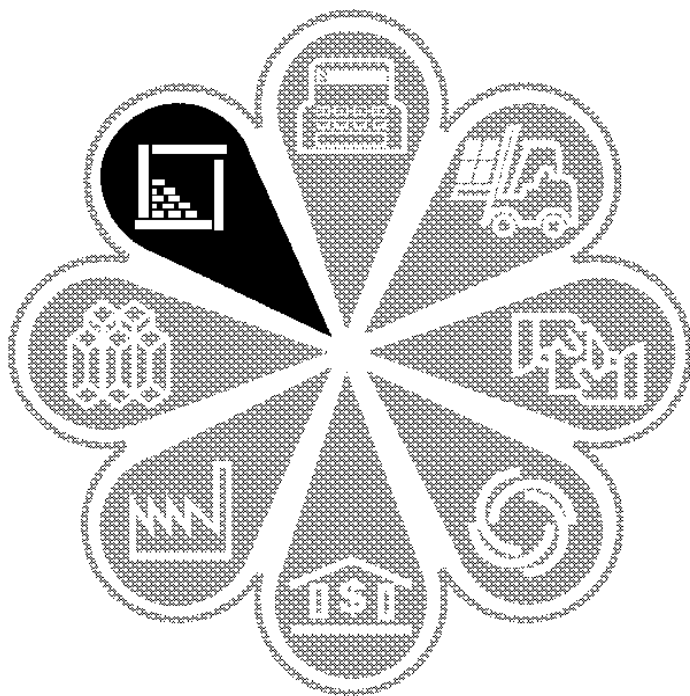
Census of Construction Industries

CC92-I-9

INDUSTRY SERIES

Heavy Construction Contractors, Not Elsewhere Classified

Industry 1629



1992

Census of

Construction Industries

CC92-I-9

INDUSTRY SERIES

Heavy Construction

Contractors,

Not Elsewhere Classified

Industry 1629

Issued October 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



**Economics and Statistics
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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records, however, resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

Contents

Heavy Construction Contractors, Not Elsewhere Classified

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appears as part of the number of each page]

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**Statistics for Establishments Without Payroll appear in the U.S. Industry
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Summary of Findings

Establishments classified in this industry are primarily engaged in heavy construction projects, not elsewhere classified, such as chemical complexes, dams and reservoirs, harbor and port facilities, missile facilities, oil refineries, subways, water and sewer treatment plants, power plants, industrial ovens and incinerators, athletic fields, golf courses, and irrigation projects. This industry also includes contractors engaged in earthmoving not connected with buildings, land drainage, leveling, and reclamation. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$34.2 billion in total dollar value of business. Of this amount, \$32.8 billion were for the value of construction work. These establishments paid out \$8.7 billion for materials, components, and supplies and \$6.1 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$780 million. Value added for 1992 was \$18.6 billion.

There were 15,816 establishments with total employment averaging 304,113 during the year. Total payroll for 1992 was \$9.3 billion.

Larger establishments with 20 employees or more, while representing only 13 percent of the total number of employer establishments in this industry accounted for 83 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

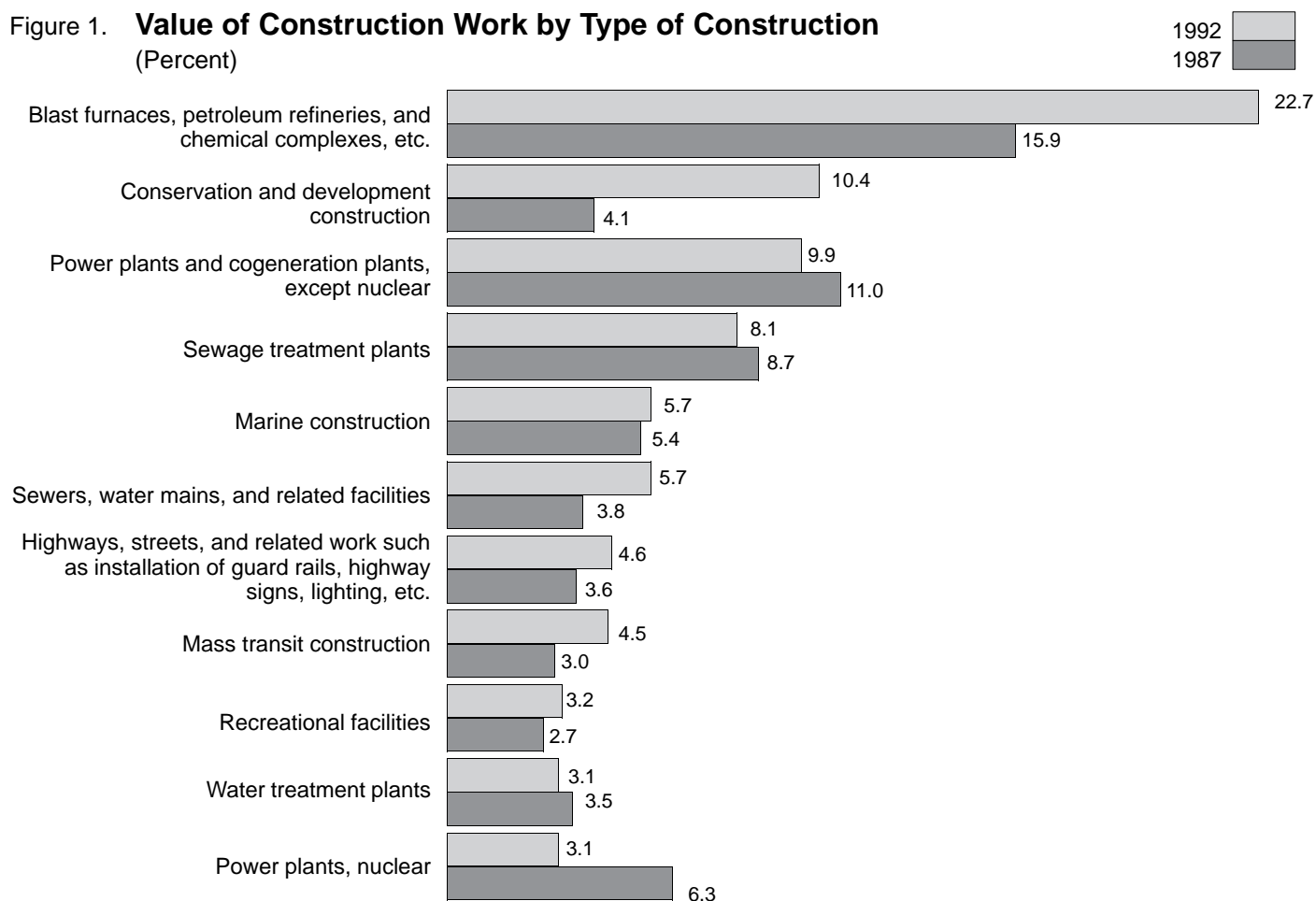


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

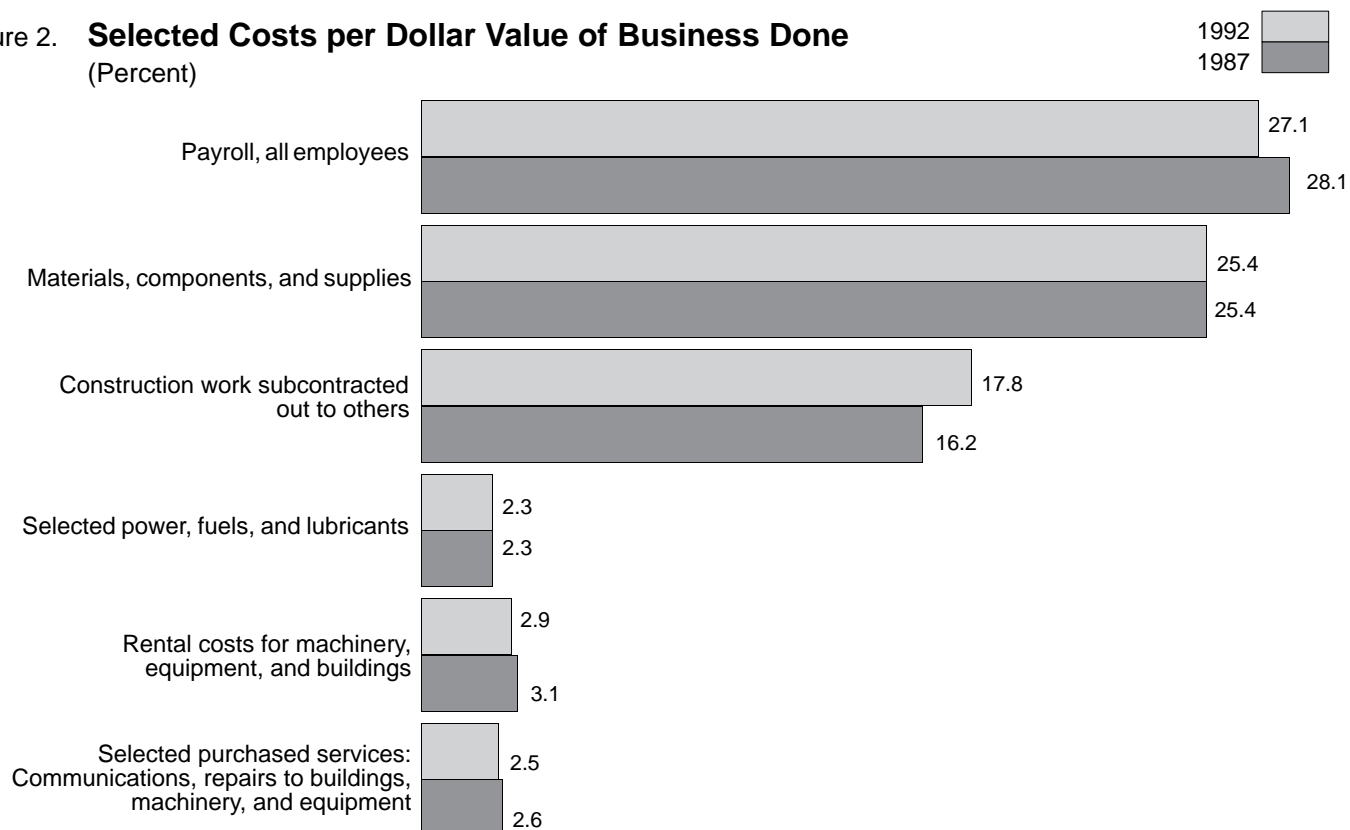


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	15 816	304 113	240 024	9 260 705	6 787 615	32 836 527	26 759 824	18 642 289	9 446 662
Alabama -----	292	5 384	3 993	143 717	84 469	634 169	566 090	301 392	300 042
Alaska -----	70	830	693	24 707	18 230	74 449	(D)	59 128	(D)
Arizona -----	139	2 624	2 023	69 622	48 886	312 993	262 012	154 627	(D)
Arkansas -----	188	1 722	1 425	37 242	29 262	169 885	154 962	87 425	75 004
California -----	1 166	31 808	25 005	1 023 383	751 401	3 567 539	2 848 798	1 982 123	970 302
Colorado -----	332	5 582	4 627	158 516	128 275	671 582	545 111	324 313	240 536
Connecticut -----	164	4 392	3 132	188 644	120 887	723 205	663 463	551 718	126 257
Delaware -----	33	535	450	13 730	11 084	42 984	38 020	28 708	11 328
District of Columbia -----	6	150	103	6 075	3 849	(D)	(D)	(D)	(D)
Florida -----	865	10 067	7 903	247 232	173 349	1 163 267	945 080	597 978	370 967
Georgia -----	442	6 811	5 392	173 416	132 213	647 813	525 835	320 152	211 570
Hawaii -----	54	972	712	32 498	21 989	149 479	113 860	90 175	47 041
Idaho -----	141	1 937	1 203	52 775	31 467	181 443	(D)	100 918	(D)
Illinois -----	472	8 288	6 760	284 321	216 804	1 201 560	950 168	732 228	301 375
Indiana -----	415	4 687	3 939	146 939	116 899	525 558	431 071	304 414	134 385
Iowa -----	370	1 694	1 309	32 489	24 371	133 207	121 421	81 045	45 360
Kansas -----	279	2 496	2 023	57 332	44 812	227 323	194 817	124 599	74 194
Kentucky -----	240	3 776	3 072	89 380	66 569	380 965	321 751	210 124	117 439
Louisiana -----	437	25 472	22 264	699 356	575 392	1 895 756	1 660 756	1 175 458	530 431
Maine -----	153	1 452	1 160	34 874	27 384	155 056	127 181	84 988	46 254
Maryland -----	221	6 755	5 542	274 934	210 011	805 266	586 254	360 471	233 861
Massachusetts -----	290	5 571	3 291	227 464	119 608	897 848	700 045	505 242	201 740
Michigan -----	468	3 537	2 844	95 566	72 749	356 851	300 768	208 293	99 766
Minnesota -----	262	2 879	2 307	93 753	67 389	378 340	309 188	219 254	92 995
Mississippi -----	148	2 373	1 911	47 844	34 482	170 521	153 356	94 256	63 264
Missouri -----	456	4 017	3 355	103 916	84 238	498 716	391 804	(D)	185 730
Montana -----	99	960	774	21 789	16 706	108 012	(D)	53 330	(D)
Nebraska -----	232	1 848	1 412	49 474	37 575	456 265	329 602	216 866	126 906
Nevada -----	83	5 855	3 631	219 570	129 026	574 674	510 299	372 788	140 495
New Hampshire -----	129	1 006	778	25 999	18 717	122 719	94 521	48 805	48 171
New Jersey -----	358	7 005	5 344	273 413	193 031	1 033 561	907 840	733 164	264 310
New Mexico -----	112	1 191	1 001	23 128	17 331	84 336	74 503	52 120	22 433
New York -----	742	7 322	5 589	263 833	179 875	1 132 037	880 949	587 640	306 915
North Carolina -----	516	5 252	3 954	126 795	79 502	661 190	458 575	322 155	146 641
North Dakota -----	80	1 012	879	25 436	21 568	(D)	84 356	58 595	(D)
Ohio -----	570	10 215	7 222	423 774	277 212	1 785 950	1 129 337	792 613	449 246
Oklahoma -----	288	3 047	2 414	71 483	52 666	261 921	236 594	161 920	78 099
Oregon -----	239	2 258	1 792	68 042	49 537	317 253	254 119	168 497	94 751
Pennsylvania -----	555	8 709	6 542	268 661	185 991	1 180 417	902 839	614 028	331 876
Rhode Island -----	56	316	238	8 121	6 155	(D)	30 325	(D)	(D)
South Carolina -----	266	5 875	3 624	167 001	132 155	440 689	375 259	224 430	155 161
South Dakota -----	114	401	319	8 053	6 373	40 058	30 837	20 508	10 648
Tennessee -----	264	5 033	4 079	162 803	128 891	595 990	451 895	275 928	181 349
Texas -----	1 289	65 915	53 842	1 987 962	1 520 257	5 153 334	4 507 245	3 579 148	1 387 117
Utah -----	140	1 771	1 469	47 341	37 698	192 050	159 246	104 349	(D)
Vermont -----	62	535	428	10 726	8 224	44 941	(D)	26 837	(D)
Virginia -----	483	7 473	6 094	192 658	138 628	643 173	543 077	364 907	188 796
Washington -----	486	8 064	6 259	263 268	188 127	1 167 465	954 593	522 935	477 074
West Virginia -----	162	3 744	3 145	85 566	67 165	259 820	246 449	154 687	100 953
Wisconsin -----	276	2 457	1 892	76 132	57 090	365 917	254 439	165 916	96 917
Wyoming -----	111	1 039	865	29 950	22 047	83 579	74 709	54 892	20 897

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
6 076 703	5 022 613	981 246	883 662	9 812 189	297 618	25 632 969	15 300 639	(Z)	(Z)	2	U.S.
68 079 (D)	91 303 (D)	9 541 4 393	14 921 *2 700	139 372 (D)	8 433 1 142	727 367 109 420	365 702 68 186	3 9	2 (D)	16 49	AL AK
50 981	41 764	17 797	6 277	65 134	3 379	240 070	141 678	5	4	11	AZ
14 923	34 575	5 904	10 666	107 345	1 742	127 253	68 106	7	5	14	AR
718 741	650 457	126 160	69 607	890 081	34 276	3 727 902	2 142 609	1	1	5	CA
126 471	123 211	16 744	17 640	116 366	4 968	463 802	260 700	3	2	20	CO
59 741	82 385	12 153	3 269	85 611	5 280	437 511	343 760	2	1	10	CT
4 963	11 082	1 579	1 895	21 199	995	76 811	52 633	5	4	4	DE
(D)	(D)	1 321	142	2 642	(D)	(D)	(D)	(Z)	(D)	(Z)	DC
218 187	201 404	51 775	32 724	329 001	12 221	1 045 318	537 580	3	2	7	FL
121 977	136 948	20 097	17 431	162 436	6 074	527 124	267 658	3	3	15	GA
35 620	(D)	4 195	7 607	55 517	1 009	119 633	64 891	6	7	22	HI
(D)	10 180	5 477	5 170	34 674	716	101 159	50 969	7	(D)	29	ID
251 392	168 529	41 926	33 595	433 413	5 954	826 500	483 592	2	1	7	IL
94 487	90 708	12 675	17 448	123 233	3 872	418 590	212 266	3	3	9	IN
11 786	17 538	2 728	7 367	62 465	1 509	115 815	64 620	10	10	23	IA
32 507	37 498	6 867	12 030	112 069	2 052	156 988	90 111	4	3	16	KS
59 214	34 419	5 295	10 747	117 015	2 201	162 468	91 124	7	8	17	KY
235 000	177 358	76 593	37 750	581 587	17 028	1 009 234	663 379	1	1	12	LA
27 875	26 636	5 761	12 841	92 285	4 236	354 726	242 682	9	7	7	ME
219 012	91 878	10 306	9 871	86 294	7 627	616 650	424 115	2	2	21	MD
197 803	196 531	22 170	9 605	164 198	6 592	723 218	399 637	2	1	10	MA
56 083	70 612	16 739	18 031	138 228	5 554	539 054	331 087	5	4	11	MI
69 152	37 059	19 138	18 453	171 359	2 451	249 555	113 022	5	4	13	MN
17 166	20 438	6 167	7 109	51 605	1 747	96 986	56 003	6	6	27	MS
106 912	67 381	13 296	26 322	198 391	2 642	239 753	131 140	4	4	14	MO
(D)	21 299	3 978	5 353	41 967	1 005	143 278	83 946	8	(D)	27	MT
126 663	15 054	7 263	9 301	82 907	936	53 864	53 864	5	2	15	NE
64 375	(D)	18 477	37 582	(D)	(D)	(D)	(D)	2	1	3	NV
28 198	28 143	2 688	7 394	49 137	1 364	123 510	73 299	7	6	10	NH
125 721	226 382	19 510	20 585	212 604	10 895	952 518	755 047	3	2	8	NJ
*9 833	*21 563	2 093	*7 220	28 504	1 330	91 129	46 804	13	14	45	NM
251 088	197 367	27 956	28 242	308 463	8 460	1 142 148	604 195	3	2	9	NY
202 615	162 571	18 827	21 086	191 470	4 141	290 159	171 677	5	3	9	NC
(D)	(D)	4 015	4 901	31 816	633	53 911	27 152	8	10	32	ND
656 613	184 366	43 877	35 355	356 505	8 340	996 536	501 273	2	2	7	OH
25 327	22 036	5 424	7 486	57 107	3 788	203 689	105 203	5	4	8	OK
63 134	60 255	12 926	11 029	93 752	971	136 822	67 295	5	4	23	OR
277 578	186 851	41 149	28 820	378 008	17 134	1 288 528	790 001	3	2	9	PA
(D)	(D)	2 971	*2 897	*9 582	376	39 435	22 710	10	10	74	RI
65 431	112 131	7 911	20 252	130 948	21 130	1 596 464	1 213 412	3	3	18	SC
9 221	(D)	(S)	1 451	(D)	137	8 293	(D)	18	17	27	SD
144 095	86 648	22 535	34 335	213 401	3 248	321 124	156 523	2	2	2	TN
646 089	655 650	131 961	104 585	1 663 742	45 713	2 753 256	1 707 817	1	1	3	TX
32 804	(D)	5 010	8 086	56 252	1 227	124 332	79 102	8	5	12	UT
(D)	4 328	*3 274	3 114	24 676	485	31 185	21 519	12	(D)	39	VT
100 096	106 870	19 613	15 292	249 865	5 961	405 087	221 412	3	3	10	VA
212 872	205 910	36 548	24 184	227 856	4 984	672 952	367 384	3	2	10	WA
13 371	58 283	8 014	10 659	67 864	2 355	146 887	106 930	3	3	19	WV
111 478	95 243	12 417	18 393	132 483	1 607	173 335	92 049	7	7	24	WI
8 870	7 556	4 902	4 840	40 712	915	77 565	40 882	7	9	26	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	15 816	14 532	7 662	8 342	1	1	2	2
Proprietors and working partners	5 097	3 585	1 914	4 451	3	4	5	5
All employees**	304 113	297 618	415 199	412 719	(Z)	(Z)	(Z)	(Z)
Construction workers:								
March	226 582	222 536	343 523	293 876	(Z)	(Z)	(Z)	(Z)
May	246 572	242 847	337 572	324 564	(Z)	1	(Z)	(Z)
August	247 058	244 807	314 569	334 002	(Z)	1	(Z)	(Z)
November	239 883	242 652	319 609	320 642	1	(Z)	(Z)	(Z)
Average	240 024	238 204	329 475	318 375	(Z)	(Z)	(Z)	(Z)
Other employees:								
March	64 739	59 511	85 453	92 739	(Z)	1	(Z)	(Z)
May	64 182	59 656	(NA)	(NA)	1	1	(NA)	(NA)
August	63 541	59 240	(NA)	(NA)	1	1	(NA)	(NA)
November	63 896	59 250	(NA)	(NA)	1	1	(NA)	(NA)
Average	64 090	59 414	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	9 260 705	7 661 992	11 062 660	7 298 267	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	6 787 615	5 726 472	8 649 399	5 274 120	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	2 473 090	1 935 519	2 413 261	2 024 147	(Z)	(Z)	(Z)	(Z)
First-quarter payroll, all employees	2 084 449	1 719 499	2 423 588	1 596 110	(Z)	(Z)	(Z)	(Z)
Fringe benefits, all employees	2 245 046	1 834 442	1 903 384	1 354 246	(Z)	(Z)	(Z)	(Z)
Legally required expenditures	1 405 536	1 177 878	1 352 977	702 449	1	(Z)	(Z)	(Z)
Voluntary expenditures	839 510	656 563	550 406	651 797	(Z)	(Z)	(Z)	(Z)
Dollar value of business done	34 165 654	27 310 131	36 310 245	23 282 543	(Z)	(Z)	(Z)	(Z)
Value of construction work	32 836 527	25 632 969	33 657 455	21 624 035	(Z)	(Z)	(Z)	(Z)
Value of construction work subcontracted in from others	5 022 613	3 294 752	1 949 539	1 217 455	2	2	1	1
Other business receipts	1 329 127	1 677 162	2 652 790	1 658 508	1	(Z)	(Z)	(Z)
Net value of construction work†	26 759 824	21 209 274	26 391 852	17 527 251	(Z)	(Z)	(Z)	(Z)
Value added††	18 642 289	15 300 639	18 952 918	12 446 662	(Z)	(Z)	(Z)	(Z)
Selected costs	15 523 366	12 009 491	17 357 327	10 835 881	(Z)	(Z)	(Z)	(Z)
Materials, components, and supplies	8 666 276	6 949 590	9 452 406	6 353 738	1	(Z)	(Z)	(Z)
Construction work subcontracted out to others	6 076 703	4 423 695	7 265 602	4 096 784	(Z)	1	(Z)	(Z)
Selected power, fuels, and lubricants	780 387	636 206	639 318	385 359	1	1	(Z)	(Z)
Electricity	74 273	65 774	105 820	42 650	1	1	(Z)	(Z)
Natural and manufactured gas	27 869	5 350	16 962	16 202	1	2	(Z)	(Z)
Gasoline and diesel fuel	618 816	512 577	465 276	276 596	1	1	(Z)	(Z)
On highway use	257 077	213 346	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	361 738	299 231	(NA)	(NA)	1	1	(NA)	(NA)
Other, including lubricating oils and greases	59 428	52 503	51 259	49 958	2	1	1	1
Rental cost for machinery, equipment, and buildings	981 246	833 356	569 707	498 877	1	1	(Z)	(Z)
For machinery and equipment	855 262	728 531	473 109	436 842	1	1	1	(Z)
For buildings	125 985	104 824	96 597	62 035	2	1	(Z)	1
Selected purchased services	864 472	705 775	438 848	409 777	1	1	(Z)	1
Communication services	129 655	107 507	115 854	78 865	1	1	(Z)	1
Repairs to buildings and other structures	34 457	22 398	13 497	15 852	3	3	2	1
Repairs to machinery and equipment	700 360	575 869	309 496	315 061	1	1	1	1
Ownership of construction projects:								
Value of construction work	32 836 527	25 632 969	33 657 455	21 624 035	(Z)	(Z)	(Z)	(Z)
Government owned	12 759 117	9 066 320	8 105 801	5 562 202	1	1	(Z)	(Z)
Federal	3 949 685	2 939 784	(NA)	(NA)	2	1	(NA)	(NA)
State and local	8 809 432	6 126 535	(NA)	(NA)	2	1	(NA)	(NA)
Privately owned	20 077 410	16 566 649	25 551 654	16 061 833	1	1	(Z)	(Z)

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	9 415 299	5 823 246	1	1
Capital expenditures, other than land -----	883 662	672 353	2	2
New -----	628 773	463 784	2	2
Used -----	254 889	208 568	4	4
Retirements and disposition of depreciable assets -----	486 772	662 169	3	2
End-of-year gross book value of depreciable assets -----	9 812 189	5 833 429	1	1
Depreciation charges during year -----	932 317	627 814	1	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	1 466 233	602 898	1	2
Capital expenditures, other than land -----	54 065	48 136	6	5
New buildings and other structures -----	42 065	30 253	6	3
Used buildings and other structures -----	11 999	17 883	17	12
Retirements and disposition of depreciable assets -----	10 932	70 954	14	2
End-of-year gross book value of depreciable assets -----	1 509 365	580 080	1	2
Depreciation charges during year -----	57 080	38 156	4	2
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	7 949 066	5 220 347	1	1
Capital expenditures, other than land -----	829 598	624 216	2	2
New machinery and equipment, including automobiles and trucks -----	586 708	433 531	2	2
New automobiles and trucks, intended primarily for highway use -----	115 141	114 588	3	4
Used machinery and equipment, including automobiles and trucks -----	242 890	190 684	4	3
Retirements and disposition of depreciable assets -----	475 840	591 214	3	2
End-of-year gross book value of depreciable assets -----	8 302 824	5 253 349	1	1
Depreciation charges during year -----	875 237	589 657	1	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	15 816	1
Value of construction work	32 836 527	(Z)
Establishments with inventories:		
Number	3 470	3
Value of construction work	12 235 830	(Z)
Inventories ¹ :		
End of 1992, materials and supplies	189 303	2
End of 1991, materials and supplies	217 868	2
Establishments with no inventories:		
Number	6 172	2
Value of construction work	15 143 582	(Z)
Establishments not reporting:		
Number	6 175	2
Value of construction work	5 457 115	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	15 816	8 733	3 116	1 935	1 266	383	240	78	34	32
All employees** -----	304 113	16 467	19 874	25 215	37 412	26 584	37 501	25 683	22 532	92 845
Payroll, all employees -----	9 260 705	285 533	399 521	621 957	1 074 312	822 881	1 264 696	863 675	776 814	3 151 316
Dollar value of business done -----	34 165 654	1 605 275	1 672 754	2 645 467	4 419 551	3 743 546	5 269 633	3 534 506	2 827 720	8 447 203
Value of construction work -----	32 836 527	1 580 233	1 628 954	2 579 056	4 280 296	3 679 441	5 140 701	3 472 395	2 668 256	7 807 195
Net value of construction work† -----	26 759 824	1 403 514	1 472 663	2 210 819	3 467 035	2 929 597	4 012 423	2 608 545	2 266 951	6 388 277
Value added†† -----	18 642 289	920 559	984 415	1 418 866	2 222 825	1 913 978	2 690 699	1 612 186	1 665 782	5 212 979
Cost of materials, components, supplies, and fuels -----	9 446 662	507 997	532 048	858 363	1 383 465	1 079 724	1 450 656	1 058 470	760 633	1 815 306
Cost of construction work subcontracted out to others -----	6 076 703	176 719	156 291	368 237	813 261	749 844	1 128 278	863 850	401 305	1 418 918
Rental cost for machinery, equipment, and buildings -----	981 246	47 551	65 202	95 359	159 650	125 890	169 785	117 781	79 607	120 422
Capital expenditures, other than land -----	883 662	84 006	89 208	98 226	139 852	112 764	129 843	91 127	42 260	96 376
End-of-year gross book value of depreciable assets -----	9 812 189	754 126	800 871	973 453	1 400 513	1 013 255	1 525 812	807 114	494 612	2 042 433
1987										
All employees** -----	297 618	15 812	18 003	24 090	35 630	29 097	29 737	24 317	21 963	98 968
Value of construction work -----	25 632 969	1 267 653	1 348 849	1 968 226	3 565 869	3 014 951	3 054 854	3 066 528	1 868 315	6 477 723
Value added†† -----	15 300 639	806 423	855 355	1 187 356	1 963 162	1 533 524	1 748 103	1 743 434	981 604	4 481 676
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	(Z)	3	4	3	2	(Z)	(Z)	(Z)	(Z)	(Z)
Net value of construction work† -----	(Z)	3	4	4	1	(Z)	(Z)	(Z)	(Z)	(Z)
Capital expenditures, other than land -----	2	8	10	7	2	(Z)	(Z)	(Z)	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	15 816	(S)	(S)	1 849	3 850	2 895	2 004	1 722	729	418	505
All employees** -----	304 113	(S)	(S)	2 829	10 641	14 478	17 701	28 647	22 662	23 413	182 062
Payroll, all employees -----	9 260 705	(S)	(S)	30 720	153 185	258 340	367 841	714 564	638 566	736 257	6 345 258
Dollar value of business done -----	34 165 654	(S)	(S)	135 671	636 045	1 022 209	1 415 172	2 662 330	2 578 943	2 919 750	22 746 151
Value of construction work -----	32 836 527	(S)	(S)	133 732	617 584	993 833	1 381 834	2 598 468	2 493 062	2 849 609	21 719 913
Net value of construction work† -----	26 759 824	(S)	(S)	129 562	587 096	929 962	1 261 759	2 292 615	2 086 978	2 301 411	17 124 050
Value added†† -----	18 642 289	(S)	(S)	86 959	397 885	643 305	846 074	1 516 238	1 378 842	1 466 978	12 275 186
Cost of materials, components, supplies, and fuels -----	9 446 662	(S)	(S)	44 542	207 671	315 033	449 022	840 239	794 018	904 573	5 875 102
Cost of construction work subcontracted out to others -----	6 076 703	(S)	(S)	4 170	30 488	63 871	120 075	305 853	406 084	548 199	4 595 863
Rental cost for machinery, equipment, and buildings -----	981 246	(S)	(S)	(S)	17 948	33 321	47 298	113 483	83 135	110 937	569 584
Capital expenditures, other than land -----	883 662	(S)	(S)	(S)	37 471	71 541	62 510	116 412	79 466	92 960	410 810
End-of-year gross book value of depreciable assets -----	9 812 189	(S)	(S)	93 325	362 328	592 703	643 425	1 089 440	772 372	892 584	5 336 485
1987											
All employees** -----	297 618	(S)	(S)	(S)	10 708	14 219	18 568	27 270	25 162	26 390	170 092
Value of construction work -----	25 632 969	(S)	(S)	(S)	581 313	829 852	1 309 915	2 141 040	2 293 841	2 530 890	15 760 452
Value added†† -----	15 300 639	(S)	(S)	(S)	395 430	549 942	849 189	1 335 111	1 307 642	1 374 428	9 366 037
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(Z)	(S)	(S)	7	5	4	4	2	2	1	(Z)
Net value of construction work† -----	(Z)	(S)	(S)	5	4	4	4	3	2	2	(Z)
Capital expenditures, other than land -----	2	(S)	(S)	(S)	11	11	11	6	2	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	32 836 527	20 484 992	4 939 024	6 187 840	(Z)	(Z)	1	1
Building construction	1 620 783	1 214 977	208 610	197 196	1	1	3	2
Single-family houses	217 277	174 349	25 253	17 675	4	5	11	11
Office buildings	187 322	154 783	19 755	12 784	2	2	5	2
Other commercial buildings such as stores, restaurants, and automobile service stations	174 640	132 438	22 854	19 348	3	3	6	11
Industrial buildings and warehouses	607 178	408 876	64 074	134 228	1	1	4	3
Other nonresidential buildings	434 365	344 531	76 675	13 160	1	1	5	6
Nonbuilding construction	29 991 073	19 270 015	4 730 414	5 990 645	(Z)	(Z)	1	(Z)
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 525 053	1 016 479	378 808	129 766	1	1	1	2
Recreational facilities	1 061 592	837 323	141 766	82 503	3	3	7	7
Bridges, tunnels, and elevated highways	596 669	393 433	155 293	47 944	1	1	1	1
Dam and reservoir construction	755 730	545 162	185 734	24 833	2	2	1	16
Marine construction	1 874 962	1 161 222	246 434	467 305	1	1	2	3
Harbor and port facilities	461 328	282 943	91 392	86 993	3	4	4	8
Conservation and development construction	3 415 547	2 358 865	559 249	497 433	2	2	4	3
Power and communication transmission lines, towers, and related facilities	219 801	139 639	(D)	(D)	3	4	(D)	(D)
Sewers, water mains, and related facilities	1 869 494	1 447 997	210 741	210 756	2	2	4	5
Sewers, sewer lines, septic systems, and related facilities	1 146 541	878 210	126 874	141 457	2	2	5	6
Water mains and related facilities	722 953	569 787	83 867	69 300	3	3	5	5
Pipeline construction other than sewer or water lines	336 352	225 897	49 384	61 071	3	4	4	7
Mass transit construction	1 490 204	847 897	401 861	240 446	2	3	3	5
Urban mass transit	541 151	371 445	(D)	(D)	4	5	(D)	(D)
Railroad construction	949 053	476 451	(D)	(D)	3	3	(D)	(D)
Blast furnaces, petroleum refineries, chemical complexes, etc.	7 466 527	4 452 648	722 996	2 290 882	(Z)	(Z)	1	(Z)
Power plants	4 289 033	2 442 739	360 728	1 485 566	(Z)	(Z)	1	(Z)
Power plants, nuclear	1 030 077	303 369	(D)	(D)	1	2	(D)	(D)
Power plants and cogeneration plants, except nuclear	3 258 956	2 139 369	(D)	(D)	(Z)	(Z)	(D)	(D)
Sewage treatment and water treatment plants	3 688 587	2 507 818	1 057 286	123 483	2	2	2	5
Sewage treatment plants	2 656 739	1 820 902	762 577	73 261	2	3	2	7
Water treatment plants	1 031 848	686 917	294 709	50 223	2	2	2	5
Oilfields	254 537	165 265	(D)	(D)	7	9	(D)	(D)
Other nonbuilding construction	685 658	444 688	120 869	120 101	1	1	(Z)	2
Construction work, n.s.k.	1 224 671	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
1987								
Value of construction work	25 632 969	16 656 969	3 826 277	4 219 372	(Z)	(Z)	1	1
Building construction	1 804 110	1 365 815	265 150	173 144	1	1	2	3
Office buildings	358 922	252 753	73 512	32 656	1	1	1	5
Other commercial buildings such as stores, restaurants, and automobile service stations	300 581	231 925	40 222	28 432	3	3	6	5
Industrial buildings and warehouses	502 589	383 756	54 921	63 911	1	1	5	4
Other nonresidential buildings	642 018	497 381	96 495	48 145	3	4	13	7
Nonbuilding construction	22 898 509	15 291 154	3 561 127	4 046 228	(Z)	(Z)	1	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	923 313	678 255	168 761	76 296	1	1	3	4
Recreational facilities	690 860	542 486	79 715	68 658	5	5	9	10
Bridges, tunnels, and elevated highways	532 104	350 212	151 149	30 741	1	2	1	4
Dam and reservoir construction	721 365	634 989	53 960	32 414	2	2	4	11
Marine construction	1 379 611	840 915	193 775	344 920	1	2	3	2
Harbor and port facilities	431 507	270 251	86 128	75 127	3	5	4	3
Conservation and development construction	1 062 716	780 319	150 236	132 160	3	3	6	6
Power and communication transmission lines, towers, and related facilities	274 727	188 258	23 741	62 728	3	4	2	4
Sewers, water mains, and related facilities	980 373	757 877	127 230	95 265	2	2	5	5
Sewers, sewer lines, septic systems, and related facilities	571 449	436 327	84 486	50 635	2	3	5	7
Water mains and related facilities	408 924	321 550	42 744	44 629	2	2	7	6
Pipeline construction other than sewer or water lines	249 086	182 001	26 579	40 505	2	3	4	6
Mass transit construction	780 781	319 557	264 065	197 158	2	3	2	4
Urban mass transit	262 313	104 780	(D)	(D)	(Z)	1	(D)	(D)
Railroad construction	518 467	214 777	(D)	(D)	3	4	(D)	(D)
Blast furnaces, petroleum refineries, chemical complexes, etc.	4 081 447	2 118 200	720 162	1 243 084	(Z)	1	(Z)	(Z)
Power plants	4 454 151	2 823 683	483 500	1 146 967	(Z)	(Z)	1	(Z)
Power plants, nuclear	1 624 007	871 015	173 453	579 538	(Z)	(Z)	(Z)	(Z)
Power plants and cogeneration plants, except nuclear	2 830 144	1 952 667	310 047	567 428	(Z)	(Z)	1	(Z)
Sewage treatment and water treatment plants	3 138 903	2 344 836	672 232	121 834	1	1	2	5
Sewage treatment plants	2 230 966	1 659 269	498 791	72 905	1	1	2	6
Water treatment plants	907 937	685 566	173 441	48 929	1	1	6	7
Oilfields	296 365	190 953	30 174	75 237	3	3	4	6
Other nonbuilding construction	2 901 200	2 268 362	329 720	303 134	5	5	9	8
Construction work, n.s.k.	930 349	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments -----	15 816	304 113	9 260 705	32 836 527	22 182 804	26 759 824	18 642 289	6 076 703	(Z)	(Z)	(Z)
Establishments not specializing by type -----	2 058	63 091	1 988 909	7 494 186	(NA)	5 888 376	4 141 317	1 605 810	1	1	1
Establishments specializing 51 percent or more -----	13 758	241 023	7 271 796	25 342 341	22 182 804	20 871 448	14 500 972	4 470 893	(Z)	(Z)	1
RECREATIONAL FACILITIES											
All establishments specializing in type -----	739	7 705	192 836	885 503	835 948	709 460	438 335	176 043	4	4	6
Establishments with —											
100 percent specialization -----	(S)	5 895	138 527	639 627	639 627	532 592	310 761	107 035	5	4	8
90 to 99 percent specialization -----	43	529	15 087	67 798	63 384	55 634	35 254	12 164	14	12	25
80 to 89 percent specialization -----	21	484	16 923	87 783	72 852	48 580	39 121	39 204	6	7	7
70 to 79 percent specialization -----	14	401	11 694	46 481	34 188	40 336	30 381	6 145	4	8	8
60 to 69 percent specialization -----	27	266	7 018	22 990	14 679	17 870	12 679	5 120	20	14	16
51 to 59 percent specialization -----	*25	130	3 586	20 823	11 219	14 448	10 139	*6 375	30	34	49
DAM AND RESERVOIR CONSTRUCTION											
All establishments specializing in type -----	174	3 614	121 986	440 290	411 325	356 243	240 671	84 047	4	4	5
Establishments with —											
100 percent specialization -----	99	2 570	96 143	341 542	341 542	273 924	182 208	67 618	4	3	3
90 to 99 percent specialization -----	*11	181	5 228	18 100	17 079	16 510	10 035	*1 591	27	24	64
80 to 89 percent specialization -----	12	211	6 312	24 359	20 379	17 452	10 281	(S)	19	34	(S)
70 to 79 percent specialization -----	*13	*52	*1 347	*4 310	*3 180	*4 216	*3 325	*94	59	62	62
60 to 69 percent specialization -----	*14	272	5 577	22 389	13 944	18 584	*13 347	3 805	36	31	16
51 to 59 percent specialization -----	*25	328	7 379	29 589	15 200	25 557	21 475	4 032	14	11	5
MARINE CONSTRUCTION											
All establishments specializing in type -----	703	11 138	348 440	1 643 075	1 477 707	1 478 768	924 677	164 307	3	2	2
Establishments with —											
100 percent specialization -----	556	6 969	203 568	983 894	983 894	879 639	549 118	104 256	4	2	2
90 to 99 percent specialization -----	46	662	22 752	85 144	78 280	(D)	43 226	(D)	13	14	(D)
80 to 89 percent specialization -----	27	1 127	40 249	170 495	147 245	152 981	115 604	17 514	3	1	2
70 to 79 percent specialization -----	35	1 089	39 036	177 895	131 345	161 427	99 276	16 468	4	2	(Z)
60 to 69 percent specialization -----	(S)	1 218	41 013	219 016	133 477	198 239	112 806	20 778	12	5	1
51 to 59 percent specialization -----	*10	*74	1 822	6 630	3 466	(D)	4 647	(D)	44	12	(D)
HARBOR AND PORT FACILITIES											
All establishments specializing in type -----	247	2 391	72 685	322 320	262 897	267 207	184 549	55 113	6	4	5
Establishments with —											
100 percent specialization -----	182	1 119	26 792	106 478	106 478	94 174	63 559	12 304	11	12	23
90 to 99 percent specialization -----	*21	139	4 334	26 580	24 432	(D)	(D)	(D)	23	6	(D)
80 to 89 percent specialization -----	5	219	7 653	24 761	19 911	(D)	(D)	(D)	(Z)	(Z)	(D)
70 to 79 percent specialization -----	17	290	11 370	60 844	43 998	(D)	31 680	(D)	2	4	(D)
60 to 69 percent specialization -----	22	623	22 536	103 657	68 078	87 101	65 351	16 556	9	4	4
51 to 59 percent specialization -----	—	—	—	—	—	—	—	—	—	—	—
CONSERVATION AND DEVELOPMENT CONSTRUCTION											
All establishments specializing in type -----	4 067	33 490	843 634	3 504 195	2 967 319	2 951 472	2 038 473	552 723	2	2	2
Establishments with —											
100 percent specialization -----	3 026	18 405	415 906	1 726 846	1 726 846	1 542 849	1 067 104	183 996	3	3	6
90 to 99 percent specialization -----	266	2 887	67 360	284 316	265 415	245 668	172 538	38 647	7	5	7
80 to 89 percent specialization -----	174	2 038	62 764	239 294	197 552	204 604	130 631	34 691	8	6	8
70 to 79 percent specialization -----	280	3 397	90 333	337 913	246 487	278 683	208 063	59 230	5	5	7
60 to 69 percent specialization -----	166	3 227	88 251	423 542	267 425	315 533	205 528	108 009	5	2	1
51 to 59 percent specialization -----	155	3 536	119 020	492 284	263 594	364 135	254 608	128 150	4	2	1
SEWERS, SEWER LINES, SEPTIC SYSTEMS, AND RELATED FACILITIES											
All establishments specializing in type -----	1 083	5 343	122 256	525 300	412 158	459 397	279 346	65 903	5	6	7
Establishments with —											
100 percent specialization -----	515	1 841	38 024	147 728	147 728	140 448	101 759	7 280	9	8	15
90 to 99 percent specialization -----	103	422	10 093	42 767	39 410	38 978	22 550	3 789	24	21	30
80 to 89 percent specialization -----	110	617	14 705	57 181	46 351	53 683	34 735	3 498	16	17	18
70 to 79 percent specialization -----	174	1 125	28 490	128 477	92 652	113 471	62 616	15 006	9	9	11
60 to 69 percent specialization -----	96	590	14 565	59 340	37 808	50 269	29 478	9 070	12	11	18
51 to 59 percent specialization -----	84	749	16 380	89 807	48 209	62 547	28 207	27 259	15	21	13
WATER MAINS AND RELATED FACILITIES											
All establishments specializing in type -----	270	1 916	42 195	193 214	157 592	170 692	100 350	22 522	9	9	13
Establishments with —											
100 percent specialization -----	131	665	13 635	67 523	67 523	61 910	34 642	5 613	18	20	37
90 to 99 percent specialization -----	26	179	4 638	21 798	20 243	*19 697	9 624	2 101	29	37	33
80 to 89 percent specialization -----	(S)	237	6 461	19 462	15 743	16 331	12 799	3 132	17	13	1
70 to 79 percent specialization -----	*28	251	4 890	27 339	19 815	21 152	9 935	(S)	24	6	(S)
60 to 69 percent specialization -----	48	445	10 230	45 351	27 654	40 642	26 594	*4 709	17	15	41
51 to 59 percent specialization -----	*11	140	2 341	11 741	6 612	10 960	6 756	781	36	32	10

9-10 HEAVY CONSTRUCTION, N.E.C.

CONSTRUCTION—INDUSTRY SERIES

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992—Con.

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
PIPELINE CONSTRUCTION OTHER THAN SEWER OR WATER LINES											
All establishments specializing in type	181	2 201	49 715	148 801	130 494	131 643	99 009	17 158	8	8	11
Establishments with —											
100 percent specialization	126	1 404	30 215	86 109	86 109	81 769	59 712	4 339	11	9	19
90 to 99 percent specialization	*11	*87	*1 744	*6 334	*5 875	*6 001	*4 586	*333	51	50	48
80 to 89 percent specialization	*5	*74	*2 072	*9 501	*8 076	*9 022	*6 304	(S)	68	73	(S)
70 to 79 percent specialization	*7	121	2 792	6 334	4 606	6 134	4 932	200	33	30	22
60 to 69 percent specialization	*13	(S)	(S)	(S)	(S)	(D)	(S)	(D)	(D)	(S)	(D)
51 to 59 percent specialization	18	*53	*1 970	*8 861	*5 032	(D)	*3 945	(D)	46	61	(D)
RAILROAD CONSTRUCTION											
All establishments specializing in type	425	7 403	198 922	1 103 131	868 891	865 538	553 134	237 593	4	3	4
Establishments with —											
100 percent specialization	362	5 490	129 274	521 156	521 156	452 404	310 274	68 751	6	5	12
90 to 99 percent specialization	*20	233	5 823	20 330	19 655	18 894	12 013	1 436	24	14	4
80 to 89 percent specialization	(S)	195	5 440	21 934	18 328	19 885	14 420	*2 049	14	34	49
70 to 79 percent specialization	3	(D)	(D)	23 510	17 470	(D)	11 852	(D)	(D)	(Z)	(D)
60 to 69 percent specialization	*8	409	16 964	(D)	(D)	(D)	(D)	(D)	7	(D)	(D)
51 to 59 percent specialization	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
BLAST FURNACES, PETROLEUM REFINERIES, CHEMICAL COMPLEXES, ETC.											
All establishments specializing in type	676	80 978	2 582 111	6 945 745	6 549 047	5 782 412	4 395 018	1 163 333	(Z)	(Z)	(Z)
Establishments with —											
100 percent specialization	500	51 421	1 580 185	4 110 292	4 110 292	3 672 208	2 676 177	438 083	(Z)	1	1
90 to 99 percent specialization	63	15 908	600 179	1 777 137	1 706 203	(D)	1 094 847	(D)	1	(Z)	(D)
80 to 89 percent specialization	56	2 634	76 430	191 497	159 016	(D)	134 903	(D)	4	3	(D)
70 to 79 percent specialization	28	4 013	123 839	384 478	290 239	298 280	206 242	86 198	2	1	2
60 to 69 percent specialization	19	3 169	104 630	261 926	166 068	230 871	148 036	31 055	3	1	(Z)
51 to 59 percent specialization	10	3 833	96 848	220 416	117 230	147 635	134 813	72 781	1	1	(Z)
POWER PLANTS AND COGENERATION PLANTS, EXCEPT NUCLEAR											
All establishments specializing in type	200	15 357	644 068	2 367 312	2 187 038	2 126 109	1 548 033	241 202	1	1	5
Establishments with —											
100 percent specialization	103	8 416	348 743	1 363 926	1 363 926	1 242 150	845 798	121 776	1	1	1
90 to 99 percent specialization	(S)	2 119	110 580	414 299	389 143	334 374	215 679	79 925	1	3	14
80 to 89 percent specialization	(S)	423	14 821	41 487	33 641	37 898	(D)	3 589	6	8	10
70 to 79 percent specialization	11	(D)	(D)	(D)	(D)	(D)	(D)	27 385	(D)	(D)	1
60 to 69 percent specialization	8	395	14 830	(D)	(D)	(D)	26 572	(D)	6	(D)	(D)
51 to 59 percent specialization	12	(D)	(D)	22 239	12 362	(D)	11 458	(D)	(D)	4	(D)
SEWAGE TREATMENT PLANTS											
All establishments specializing in type	508	14 060	461 024	2 531 920	2 026 348	1 670 339	969 023	861 582	2	3	1
Establishments with —											
100 percent specialization	233	4 410	139 159	860 089	860 089	570 371	308 228	289 718	4	2	1
90 to 99 percent specialization	60	1 059	42 282	270 995	249 371	205 698	105 233	65 297	18	22	11
80 to 89 percent specialization	39	786	27 508	185 991	155 306	116 281	55 254	69 710	9	6	2
70 to 79 percent specialization	72	1 720	51 070	294 128	220 193	214 663	127 153	79 465	5	3	2
60 to 69 percent specialization	50	3 224	115 080	492 365	314 750	313 990	205 572	178 375	4	4	4
51 to 59 percent specialization	54	2 861	85 927	428 352	226 639	249 337	167 583	179 015	2	1	1
WATER TREATMENT PLANTS											
All establishments specializing in type	213	4 353	131 340	713 826	511 116	524 750	291 046	189 075	4	3	4
Establishments with —											
100 percent specialization	130	1 148	32 332	151 012	151 012	108 314	61 190	42 698	9	6	5
90 to 99 percent specialization	6	251	8 569	27 089	24 573	22 153	14 126	4 936	(Z)	(Z)	(Z)
80 to 89 percent specialization	*15	290	6 856	45 403	37 510	31 708	17 687	13 696	7	10	6
70 to 79 percent specialization	13	752	19 503	99 011	71 723	81 660	43 562	17 351	4	3	1
60 to 69 percent specialization	(S)	993	40 425	169 406	107 115	129 908	72 526	39 498	8	4	5
51 to 59 percent specialization	18	919	23 655	221 904	119 182	151 007	81 955	70 897	7	6	9
OILFIELDS											
All establishments specializing in type	321	4 210	90 845	258 061	249 470	242 269	190 514	15 791	6	7	12
Establishments with —											
100 percent specialization	284	3 420	76 206	219 139	219 139	205 951	165 245	13 188	7	8	13
90 to 99 percent specialization	20	305	6 242	15 615	14 238	14 172	9 768	*1 443	24	18	60
80 to 89 percent specialization	*8	147	*1 911	*6 532	*5 416	*6 272	3 329	260	34	44	33
70 to 79 percent specialization	5	130	3 512	7 172	5 260	(D)	5 993	(D)	18	26	(D)
60 to 69 percent specialization	*4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
51 to 59 percent specialization	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	15 816	240 024	226 582	246 572	247 058	239 883	1	(Z)	(Z)	(Z)	(Z)	1
Alabama	292	3 993	3 785	4 075	4 133	3 978	11	3	4	4	3	3
Alaska	70	693	223	847	884	817	15	9	17	10	8	10
Arizona	139	2 023	2 043	2 387	2 101	1 561	11	5	4	7	5	5
Arkansas	188	1 425	1 284	1 366	1 557	1 494	13	7	6	7	7	9
California	1 166	25 005	25 296	24 403	26 033	24 287	5	1	1	1	1	1
Colorado	332	4 627	4 487	4 879	4 547	4 597	9	3	3	3	4	3
Connecticut	164	3 132	2 581	3 580	2 531	3 838	13	3	3	3	4	2
Delaware	33	450	430	443	443	485	17	5	3	5	5	5
District of Columbia	6	103	(D)	(D)	(D)	(D)	(Z)	(Z)	(D)	(D)	(D)	(D)
Florida	865	7 903	7 976	7 957	7 774	7 907	5	3	3	3	3	3
Georgia	442	5 392	5 176	5 403	5 641	5 348	8	3	3	3	3	3
Hawaii	54	712	697	765	697	690	14	6	6	5	5	7
Idaho	141	1 203	1 192	1 312	1 219	1 089	15	9	8	9	9	10
Illinois	472	6 760	5 777	7 269	7 509	6 487	8	2	2	2	2	2
Indiana	415	3 939	3 566	4 051	3 882	4 255	9	3	3	3	3	3
Iowa	370	1 309	1 079	1 499	1 414	1 244	7	11	11	11	12	12
Kansas	279	2 023	1 797	2 059	2 170	2 066	9	4	5	4	4	4
Kentucky	240	3 072	2 746	3 246	3 210	3 088	11	8	5	8	7	19
Louisiana	437	22 264	22 780	22 839	21 542	21 894	7	1	1	1	1	2
Maine	153	1 160	731	1 104	1 511	1 294	16	9	12	9	10	9
Maryland	221	5 542	6 407	4 916	5 730	5 113	11	2	1	2	2	2
Massachusetts	290	3 291	2 682	3 311	3 630	3 540	9	2	2	2	2	2
Michigan	468	2 844	1 832	3 092	3 503	2 949	8	5	6	5	5	5
Minnesota	262	2 307	(D)	(D)	2 938	2 264	11	5	(D)	(D)	5	6
Mississippi	148	1 911	1 345	1 628	2 340	2 332	13	7	7	7	8	6
Missouri	456	3 355	2 835	3 573	3 900	3 114	8	4	5	4	4	5
Montana	99	774	(D)	770	931	(D)	16	9	(D)	10	10	(D)
Nebraska	232	1 412	1 039	1 409	1 741	1 459	9	6	7	6	5	7
Nevada	83	3 631	3 613	3 658	3 818	3 436	15	3	2	3	3	4
New Hampshire	129	778	483	798	955	874	13	7	8	6	6	8
New Jersey	358	5 344	4 715	5 887	5 541	5 233	8	3	2	3	3	3
New Mexico	112	1 001	1 057	1 077	839	1 031	18	14	13	13	24	12
New York	742	5 589	4 117	5 844	6 443	5 955	6	3	3	3	3	3
North Carolina	516	3 954	3 654	4 086	4 073	4 002	8	5	6	5	5	5
North Dakota	80	879	504	1 021	998	991	19	8	9	7	8	8
Ohio	570	7 222	6 317	8 302	6 755	7 514	7	3	2	2	3	3
Oklahoma	288	2 414	2 507	2 462	2 385	2 302	8	5	4	4	5	5
Oregon	239	1 792	1 612	1 767	1 989	1 800	11	5	6	5	5	5
Pennsylvania	555	6 542	5 506	6 920	7 163	6 580	7	3	3	3	3	3
Rhode Island	56	238	(D)	252	(D)	251	20	10	(D)	9	(D)	9
South Carolina	266	3 624	3 416	3 280	3 423	4 379	11	4	4	4	4	4
South Dakota	114	319	(D)	324	367	(D)	16	18	(D)	17	17	(D)
Tennessee	264	4 079	3 285	3 883	3 903	5 243	11	2	3	2	3	2
Texas	1 289	53 842	55 648	55 692	52 812	51 218	5	1	1	1	1	1
Utah	140	1 469	1 216	1 705	1 523	1 430	13	8	6	13	8	8
Vermont	62	428	259	442	550	459	22	14	21	16	13	14
Virginia	483	6 094	5 955	5 891	6 389	6 140	8	2	2	3	2	2
Washington	486	6 259	5 935	6 217	6 606	6 276	8	3	3	2	3	3
West Virginia	162	3 145	2 367	3 365	3 306	3 543	14	3	4	3	3	2
Wisconsin	276	1 892	1 280	2 001	2 390	1 896	12	7	7	7	7	7
Wyoming	111	865	747	843	943	927	15	7	6	7	9	6

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	32 836 527	15 631	23 539 892	3 839	9 296 635	25 632 969	28.1	(Z)	1	(Z)
Alabama -----	777 272	288	480 583	116	296 688	410 227	89.5	2	3	1
Alaska -----	99 723	64	(D)	5	(D)	(D)	(D)	6	(D)	(D)
Arizona -----	451 013	138	258 634	61	192 379	401 997	12.2	4	6	2
Arkansas -----	205 254	187	98 903	92	106 351	218 253	-6.0	4	8	3
California -----	3 597 305	1 165	3 013 406	83	583 899	3 289 376	9.4	1	1	(Z)
Colorado -----	392 959	329	338 074	34	54 885	354 894	10.7	3	4	2
Connecticut -----	301 328	163	167 957	46	133 371	322 644	-6.6	3	6	1
Delaware -----	94 156	33	36 733	65	57 423	52 698	78.7	2	5	1
District of Columbia -----	(D)	(S)	(D)	28	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	1 439 527	853	1 027 002	116	412 525	1 147 352	25.5	2	3	1
Georgia -----	663 138	438	451 087	114	212 051	892 864	-25.7	3	4	1
Hawaii -----	(D)	54	(D)	28	128 971	(D)	(D)	(D)	(D)	1
Idaho -----	144 881	130	101 645	27	43 236	95 961	51.0	8	12	(Z)
Illinois -----	916 190	468	682 394	123	233 796	875 416	4.7	2	2	1
Indiana -----	573 785	406	418 652	89	155 133	364 855	57.3	3	3	2
Iowa -----	156 858	370	122 898	52	33 960	159 247	-1.5	8	10	7
Kansas -----	187 095	272	130 613	44	56 483	143 294	30.6	3	4	3
Kentucky -----	463 802	239	340 018	89	123 784	334 952	38.5	6	8	1
Louisiana -----	2 082 071	432	1 500 485	133	581 586	1 092 045	90.7	1	2	1
Maine -----	(D)	153	(D)	29	116 741	(D)	(D)	(D)	(D)	1
Maryland -----	424 406	218	271 729	94	152 677	378 021	12.3	3	4	3
Massachusetts -----	790 964	287	656 718	66	134 246	828 783	-4.6	1	1	1
Michigan -----	579 598	467	311 719	78	267 878	517 548	12.0	2	4	(Z)
Minnesota -----	304 230	260	251 495	44	52 735	152 627	99.3	4	5	2
Mississippi -----	329 748	148	155 758	92	173 989	160 783	105.1	3	6	(Z)
Missouri -----	529 283	445	378 608	85	150 675	230 103	130.0	4	5	2
Montana -----	118 790	99	85 373	17	33 417	148 268	-19.9	5	7	1
Nebraska -----	497 623	228	410 161	47	87 462	57 272	768.9	2	2	1
Nevada -----	(D)	83	(D)	68	221 408	604 717	(D)	(D)	(D)	2
New Hampshire -----	75 220	124	62 884	56	12 335	220 094	-65.8	7	8	6
New Jersey -----	919 686	351	544 141	90	375 545	1 502 327	-38.8	2	4	(Z)
New Mexico -----	(D)	112	(D)	45	121 163	120 396	(D)	(D)	(D)	(Z)
New York -----	1 575 476	739	940 656	167	634 820	1 189 857	32.4	1	2	1
North Carolina -----	587 669	493	258 224	138	329 445	556 435	5.6	2	5	1
North Dakota -----	89 623	80	58 046	36	31 577	76 223	17.6	11	16	1
Ohio -----	889 117	568	746 917	94	142 200	768 941	15.6	2	3	2
Oklahoma -----	244 615	(S)	186 491	64	58 124	166 494	46.9	5	6	5
Oregon -----	354 044	221	277 917	72	76 127	183 765	92.7	3	4	2
Pennsylvania -----	1 390 479	550	796 757	190	593 723	1 145 072	21.4	1	2	1
Rhode Island -----	42 293	55	31 459	33	10 834	44 277	-4.5	7	10	14
South Carolina -----	393 844	265	281 267	129	112 577	530 398	-25.7	3	5	2
South Dakota -----	54 181	114	38 788	37	15 393	20 796	160.5	10	14	4
Tennessee -----	688 442	260	317 820	84	370 622	330 196	108.5	2	3	1
Texas -----	4 647 434	1 281	4 294 510	157	352 924	2 904 366	60.0	2	2	1
Utah -----	331 084	139	154 364	19	176 720	(D)	(D)	2	5	(Z)
Vermont -----	(D)	62	(D)	29	46 216	60 030	(D)	(D)	(D)	4
Virginia -----	907 706	481	541 204	134	366 502	589 443	54.0	2	3	1
Washington -----	1 086 847	483	770 463	70	316 384	595 312	82.6	3	4	2
West Virginia -----	325 699	158	149 848	117	175 852	188 125	73.1	2	5	1
Wisconsin -----	365 702	275	285 893	44	79 809	185 419	97.2	6	7	1
Wyoming -----	115 244	(S)	73 000	69	42 244	(D)	(D)	6	9	2

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	34 165 654	27 310 131	(Z)	(Z)
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS				
General building contractor	659 365	1 169 246	(Z)	1
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS				
Blasting contractor, except building demolition.....	195 721	114 092	7	9
Dredging contractor	605 240	506 611	4	1
Excavating, earthmoving, and land clearing contractor, not connected with buildings	5 072 960	3 843 069	1	2
Heavy construction contractor	22 474 255	17 379 291	(Z)	(Z)
Highway and street general contractor	1 189 524	654 542	1	1
Paving contractor	179 378	245 554	1	4
Pile driving contractors.....	326 851	284 089	3	4
Special cases.....	724 408	(NA)	2	(NA)
Trenching contractor	350 271	412 983	5	4
SPECIAL TRADE CONTRACTORS				
Excavating, earth and land clearing contractor, connected with buildings	463 391	75 878	2	6
Other construction activities	499 379	571 818	2	(NA)
OTHER BUSINESS ACTIVITIES				
Construction management services	279 933	814 220	1	(Z)
Engineering services	491 061	381 471	(Z)	(Z)
Other business activities	546 902	478 393	2	(NA)
Kind of business activity, n.s.k.	107 014	378 871	5	4

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	19.2	20.5	1
Number of construction workers	15.2	16.4	1
Number of all other employees	4.1	4.1	1
Payroll, all employees \$1,000 ..	585.5	527.2	1
Payroll, construction workers do ..	429.1	394.1	1
Payroll, other employees do ..	156.4	133.2	1
Dollar value of business done do ..	2 160.1	1 879.3	1
Value of construction work do ..	2 076.1	1 763.9	1
Cost of materials, components, supplies, and fuels	597.3	522.0	1
Construction work subcontracted to others	384.2	304.4	1
Rental cost for machinery, equipment, and buildings	62.0	57.3	2
Capital expenditures, other than land	55.9	46.3	2
Gross book value of depreciable assets	620.4	401.4	1
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	30.5	25.7	(Z)
Dollar value of business done do ..	112.3	91.8	(Z)
Value added†† do ..	61.3	51.4	(Z)
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	28.3	24.0	(Z)
Value of construction work do ..	136.8	107.6	(Z)
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	38.6	32.6	(Z)
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.282	.299	(Z)
Cost of materials, components, supplies, and fuels .....	.288	.296	(Z)
Cost of construction work subcontracted out to others .....	.185	.173	(Z)
Value of construction work subcontracted in from others .....	.153	.129	1
Rental cost for machinery, equipment, and buildings .....	.030	.033	1

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	19.2	30.5	136.8	.282	.288	.185	.153	.030
Alabama -----	18.4	26.7	158.8	.227	.473	.107	.144	.015
Alaska -----	11.9	29.8	107.4	.332	(D)	(D)	(D)	.059
Arizona -----	18.9	26.5	154.7	.222	(D)	.163	.133	.057
Arkansas -----	9.1	21.6	119.2	.219	.441	.088	.204	.035
California -----	27.3	32.2	142.7	.287	.272	.201	.182	.035
Colorado -----	16.8	28.4	145.1	.236	.358	.188	.183	.025
Connecticut -----	26.8	43.0	230.9	.261	.175	.083	.114	.017
Delaware -----	16.0	25.7	95.5	.319	.264	.115	.258	.037
District of Columbia -----	25.0	40.5	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	11.6	24.6	147.2	.213	.319	.188	.173	.045
Georgia -----	15.4	25.5	120.1	.268	.327	.188	.211	.031
Hawaii -----	18.1	33.4	209.9	.217	.315	.238	(D)	.028
Idaho -----	13.7	27.2	150.8	.291	(D)	(D)	.056	.030
Illinois -----	17.5	34.3	177.7	.237	.251	.209	.140	.035
Indiana -----	11.3	31.4	133.4	.280	.256	.180	.173	.024
Iowa -----	4.6	19.2	101.8	.244	.341	.088	.132	.020
Kansas -----	8.9	23.0	112.4	.252	.326	.143	.165	.030
Kentucky -----	15.7	23.7	124.0	.235	.308	.155	.090	.014
Louisiana -----	58.3	27.5	85.1	.369	.280	.124	.094	.040
Maine -----	9.5	24.0	133.7	.225	.298	.180	.172	.037
Maryland -----	30.5	40.7	145.3	.341	.290	.272	.114	.013
Massachusetts -----	19.2	40.8	272.8	.253	.225	.220	.219	.025
Michigan -----	7.6	27.0	125.5	.268	.280	.157	.198	.047
Minnesota -----	11.0	32.6	164.0	.248	.246	.183	.098	.051
Mississippi -----	16.1	20.2	89.2	.281	.371	.101	.120	.036
Missouri -----	8.8	25.9	148.6	.208	.372	.214	.135	.027
Montana -----	9.7	22.7	139.6	.202	(D)	(D)	.197	.037
Nebraska -----	8.0	26.8	323.1	.108	.278	.278	.033	.016
Nevada -----	71.0	37.5	158.3	.382	.244	.112	(D)	.032
New Hampshire -----	7.8	25.8	157.7	.212	.393	.230	.229	.022
New Jersey -----	19.6	39.0	193.4	.265	.256	.122	.219	.019
New Mexico -----	10.7	19.4	84.3	.274	.266	.117	*.256	.025
New York -----	9.9	36.0	202.5	.233	.271	.222	.174	.025
North Carolina -----	10.2	24.1	167.2	.192	.222	.306	.246	.028
North Dakota -----	12.7	25.1	(D)	(D)	(D)	(D)	(D)	(D)
Ohio -----	17.9	41.5	247.3	.237	.252	.368	.103	.025
Oklahoma -----	10.6	23.5	108.5	.273	.298	.097	.084	.021
Oregon -----	9.5	30.1	177.0	.214	.299	.199	.190	.041
Pennsylvania -----	15.7	30.8	180.4	.228	.281	.235	.158	.035
Rhode Island -----	5.7	25.7	(D)	(D)	(D)	(D)	(D)	(D)
South Carolina -----	22.1	28.4	121.6	.379	.352	.148	.254	.018
South Dakota -----	3.5	20.1	125.6	.201	.266	.230	(D)	(S)
Tennessee -----	19.0	32.3	146.1	.273	.304	.242	.145	.038
Texas -----	51.1	30.2	95.7	.386	.269	.125	.127	.026
Utah -----	12.6	26.7	130.7	.247	(D)	.171	(D)	.026
Vermont -----	8.7	20.0	105.0	.239	(D)	(D)	.096	*.073
Virginia -----	15.5	25.8	105.5	.300	.294	.156	.166	.030
Washington -----	16.6	32.6	186.5	.226	.409	.182	.176	.031
West Virginia -----	23.1	22.9	82.6	.329	.389	.051	.224	.031
Wisconsin -----	8.9	31.0	193.4	.208	.265	.305	.260	.034
Wyoming -----	9.4	28.8	96.6	.358	.250	.106	.090	.059

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
- **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
- **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- **Outdoor swimming pools.** Includes wading pools and reflecting pools.
- **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
- **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
- **Fencing.** Includes all types of fencing.
- **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
- **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
- **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- **Harbor and port facilities.** Includes docks, piers, and wharves.
- **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
- **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
- **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
- **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
- **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

Nonbuilding construction:

- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

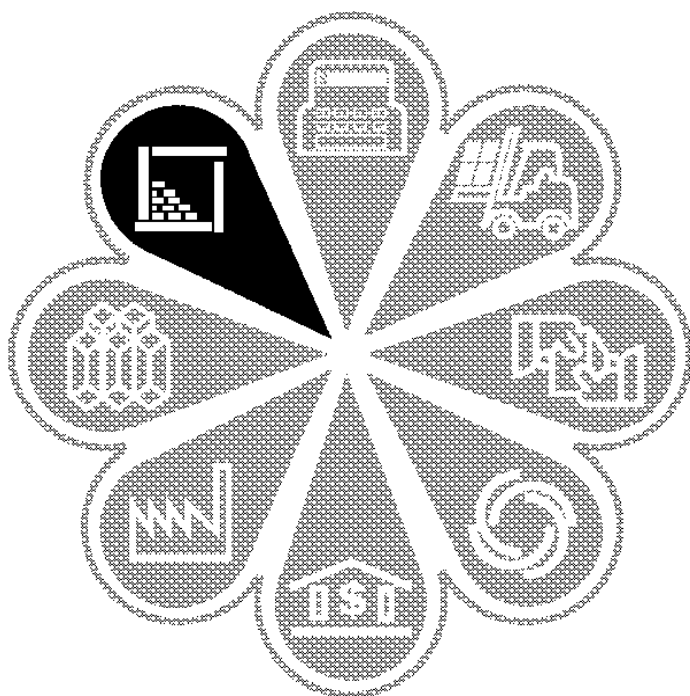
Census of Construction Industries

CC92-I-10

INDUSTRY SERIES

Plumbing, Heating, and Air-Conditioning Special Trade Contractors

Industry 1711



1992 Census of Construction Industries

CC92-I-10

INDUSTRY SERIES

Plumbing, Heating, and Air-Conditioning Special Trade Contractors

Industry 1711

Issued August 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Summary of Findings

Establishments classified in this industry are primarily engaged in plumbing, heating, or air-conditioning work or any combination of these types of work. Sheet metal work performed by plumbing, heating, and air-conditioning contractors in conjunction with the installation of plumbing, heating, and air-conditioning equipment is included here; but roofing and sheet metal work contractors are classified in Industry 1761, Roofing, Siding, and Sheet Metal Work Special Trade Contractors. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$57.7 billion in total dollar value of business. Of this amount, \$56.9 billion were for the value of construction work. These establishments paid out \$21.1 billion for materials, components, and supplies and \$6.1 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$949 million. Value added for 1992 was \$29.4 billion.

There were 75,395 establishments with total employment averaging 612,516 during the year. Total payroll for 1992 was \$16.6 billion.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Larger establishments with 20 employees or more, while representing only 8 percent of the total number of employer establishments in this industry, accounted for 56 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

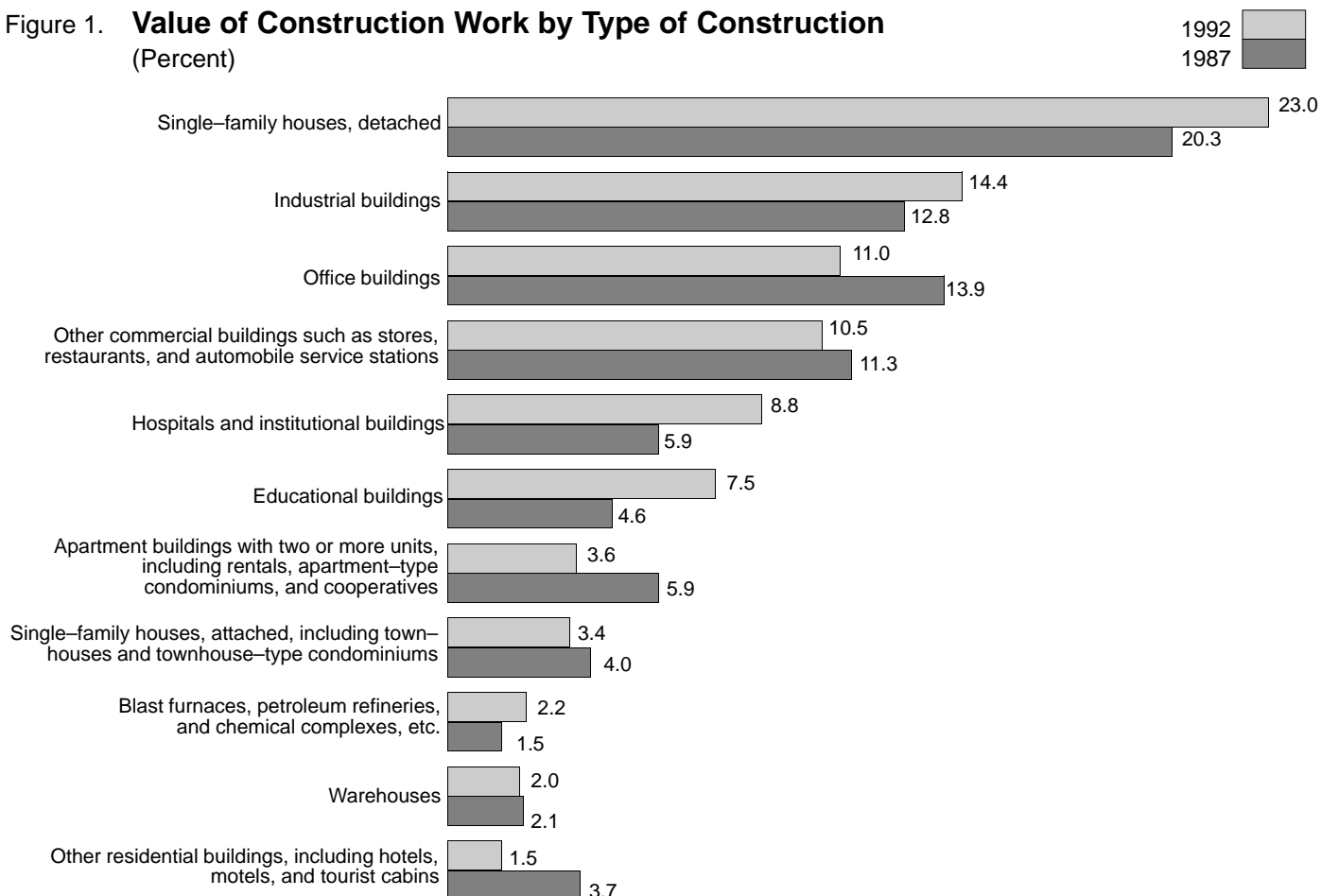


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

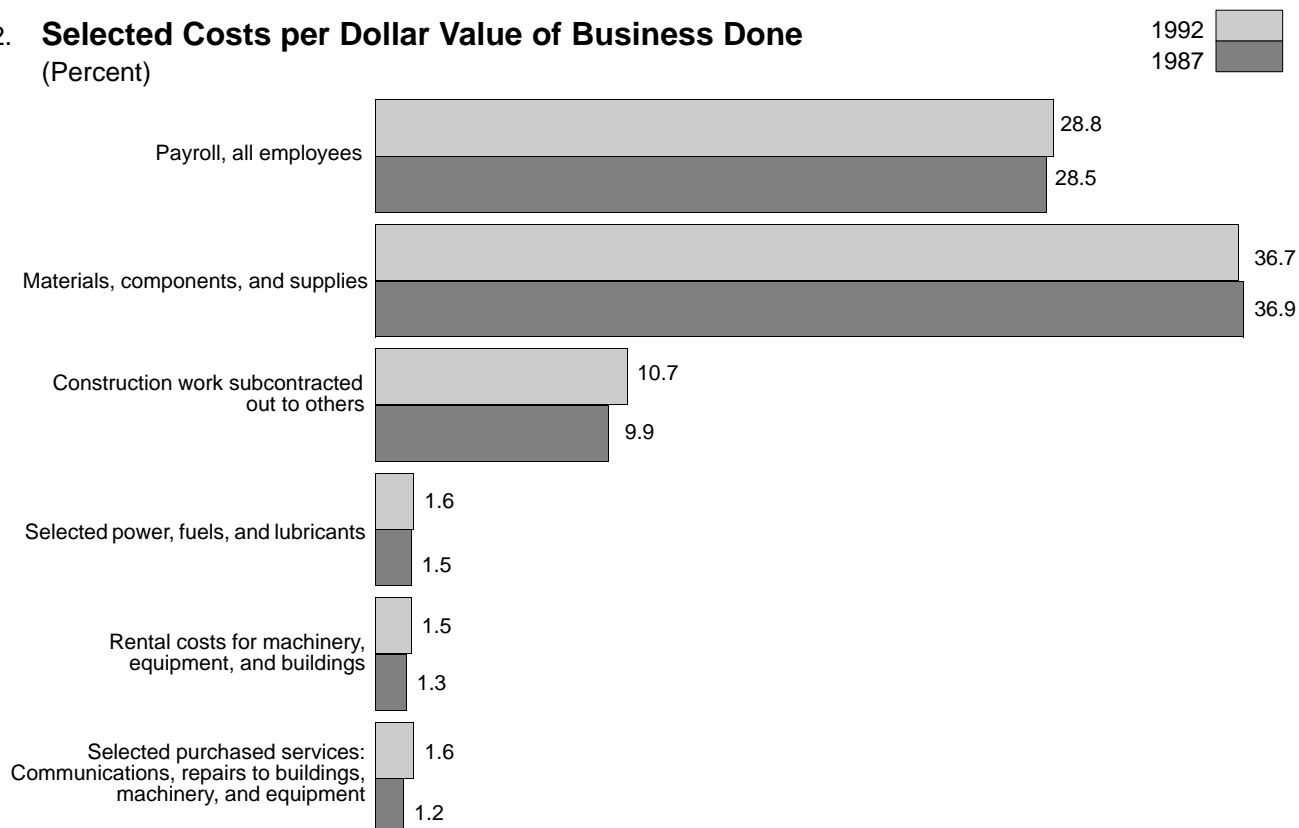


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	75 395	612 516	455 117	16 613 239	11 781 219	56 902 406	50 755 709	29 431 529	22 089 755
Alabama -----	1 140	10 667	8 328	237 663	172 412	800 645	743 871	437 945	328 018
Alaska -----	175	1 112	783	38 402	26 096	163 572	130 690	69 245	64 126
Arizona -----	1 085	9 435	7 210	213 561	153 237	789 707	742 960	397 358	356 070
Arkansas -----	695	5 225	4 109	107 485	82 023	384 733	349 806	191 285	163 240
California -----	6 998	55 569	40 972	1 786 647	1 253 096	5 956 333	5 498 412	3 357 578	2 195 438
Colorado -----	1 232	9 931	7 457	258 526	189 184	910 429	808 840	443 663	379 663
Connecticut -----	1 236	7 665	5 448	238 989	163 517	795 322	694 815	413 725	292 459
Delaware -----	233	2 461	1 854	62 626	44 478	196 478	170 518	104 753	68 303
District of Columbia -----	39	1 250	957	40 881	30 501	106 382	95 994	62 247	35 174
Florida -----	4 584	36 926	26 905	795 789	535 653	2 910 802	2 649 193	1 432 364	1 257 414
Georgia -----	2 029	17 291	13 017	392 050	271 382	1 435 736	1 260 720	677 517	590 889
Hawaii -----	251	2 716	1 877	101 857	67 567	331 053	298 729	177 496	127 874
Idaho -----	396	3 131	2 360	71 046	53 330	267 366	250 144	131 171	121 612
Illinois -----	3 534	30 869	22 344	989 520	713 580	3 106 163	2 817 296	1 726 829	1 127 389
Indiana -----	1 634	17 569	13 060	507 684	371 705	1 553 176	1 375 942	840 535	560 397
Iowa -----	925	6 950	5 147	172 832	125 910	608 929	540 978	315 930	242 009
Kansas -----	885	6 472	4 621	159 923	110 401	595 627	543 310	300 620	250 417
Kentucky -----	1 092	9 338	7 244	197 854	144 904	720 106	642 480	343 068	314 016
Louisiana -----	1 006	8 068	6 006	183 734	128 853	671 604	592 082	310 207	287 048
Maine -----	495	2 318	1 607	52 208	35 548	191 826	172 185	107 541	72 399
Maryland -----	1 752	18 398	13 654	511 809	344 231	1 771 689	1 487 191	866 750	637 495
Massachusetts -----	1 915	12 007	8 747	374 420	264 823	1 305 949	1 108 895	663 691	462 043
Michigan -----	2 641	19 464	14 150	566 541	397 611	1 966 036	1 715 611	1 016 885	740 903
Minnesota -----	1 305	11 727	8 619	377 246	277 359	1 249 940	1 087 734	652 901	449 897
Mississippi -----	590	4 448	3 411	95 013	67 970	371 878	331 500	169 903	170 684
Missouri -----	1 698	12 588	9 488	357 367	266 489	1 199 720	1 033 047	600 699	442 243
Montana -----	277	1 344	973	34 090	23 621	126 259	112 947	63 217	52 898
Nebraska -----	621	4 824	3 542	114 353	81 413	397 357	361 770	194 045	171 302
Nevada -----	370	3 990	3 070	118 943	87 577	407 390	384 000	220 473	170 055
New Hampshire -----	430	2 436	1 735	65 601	46 841	219 830	191 975	109 344	85 113
New Jersey -----	3 031	18 189	13 087	597 787	413 598	1 963 728	1 716 376	1 045 994	689 322
New Mexico -----	498	3 309	2 538	65 217	46 890	243 865	217 524	127 581	94 802
New York -----	5 026	37 160	26 743	1 142 038	781 545	4 037 256	3 435 502	2 062 954	1 408 069
North Carolina -----	2 541	25 463	19 708	579 449	413 223	1 983 422	1 822 909	987 613	860 462
North Dakota -----	221	1 378	1 087	34 695	26 899	128 338	111 502	61 801	55 598
Ohio -----	3 138	27 773	20 635	739 849	530 323	2 545 882	2 227 564	1 282 644	971 912
Oklahoma -----	957	5 235	3 853	108 461	76 436	432 174	392 416	199 734	196 752
Oregon -----	802	7 071	5 266	208 954	153 494	697 771	617 747	343 211	282 831
Pennsylvania -----	3 459	31 411	23 889	934 974	696 592	3 056 292	2 669 234	1 621 444	1 100 063
Rhode Island -----	328	1 603	1 151	46 309	33 235	167 687	149 698	87 159	63 214
South Carolina -----	1 145	9 811	7 475	204 251	144 479	687 125	627 204	334 437	299 102
South Dakota -----	244	1 393	1 026	28 237	20 740	107 170	99 412	54 618	47 725
Tennessee -----	1 318	13 599	10 521	302 404	209 191	1 089 836	996 794	532 988	472 357
Texas -----	4 629	36 218	26 938	878 467	610 917	3 198 146	2 884 020	1 584 673	1 333 946
Utah -----	575	4 480	3 485	112 188	85 044	428 277	369 042	203 812	177 233
Vermont -----	261	1 059	769	23 538	17 024	89 977	81 576	47 417	35 575
Virginia -----	2 168	18 503	13 953	428 557	302 312	1 374 534	1 270 564	701 906	586 131
Washington -----	1 469	14 223	10 481	444 098	313 719	1 453 211	1 290 825	793 115	543 911
West Virginia -----	399	2 650	2 036	51 130	37 831	196 810	182 903	106 497	81 425
Wisconsin -----	1 734	14 921	11 119	437 937	321 278	1 428 177	1 326 527	812 310	538 073
Wyoming -----	192	877	662	20 037	15 138	80 693	72 736	40 638	34 665

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
6 146 698	29 450 247	860 629	754 154	6 537 542	617 333	49 503 323	25 911 790	(Z)	(Z)	2	U.S.
56 774	399 435	10 622	15 133	98 325	9 187	596 364	299 431	2	2	11	AL
32 882	112 553	2 115	1 500	18 388	871	104 971	54 019	6	5	15	AK
46 748	546 459	14 846	9 364	79 154	10 545	757 758	386 705	2	2	10	AZ
34 927	206 739	7 090	9 451	53 164	3 763	261 538	115 804	3	4	17	AR
457 921	3 789 213	116 356	73 581	630 504	64 720	5 975 639	3 365 458	1	1	4	CA
101 589	606 648	15 147	12 408	96 237	10 225	634 449	302 483	2	2	17	CO
100 507	362 466	10 801	8 460	96 698	11 107	949 573	501 254	3	2	18	CT
25 960	93 706	4 249	2 166	24 315	2 658	197 689	104 334	6	5	30	DE
10 388	54 709	1 874	953	10 926	1 172	94 492	51 141	4	2	3	DC
261 609	1 557 301	43 274	39 114	348 139	42 344	2 793 088	1 412 969	1	1	8	FL
175 017	702 652	18 720	15 916	156 712	19 379	1 437 158	680 239	2	2	8	GA
32 324	229 365	7 972	3 539	35 385	2 083	204 342	126 024	3	3	12	HI
17 222	180 767	2 325	5 800	38 057	1 657	116 977	60 991	4	5	23	ID
288 867	1 466 429	41 276	38 963	365 717	28 475	2 596 230	1 407 347	1	2	7	IL
177 234	756 831	31 535	20 082	175 378	14 755	1 201 123	632 928	2	1	9	IN
67 951	267 453	7 572	12 475	83 779	5 079	369 059	185 324	2	2	13	IA
52 318	255 009	7 536	7 591	65 034	5 811	402 292	230 056	3	4	10	KS
77 625	381 491	10 388	10 619	76 850	8 161	543 223	277 988	2	2	10	KY
79 522	324 388	10 650	6 321	62 192	6 487	462 665	219 696	2	2	13	LA
19 641	68 858	3 566	1 910	27 356	2 875	206 533	109 869	5	5	25	ME
284 498	1 012 463	24 858	18 729	181 442	21 202	1 746 564	882 217	2	1	6	MD
197 054	618 989	19 830	12 185	140 586	17 765	1 563 375	832 123	2	2	10	MA
250 425	961 007	25 745	27 278	226 209	19 591	1 772 975	945 744	2	1	10	MI
162 206	641 069	13 505	15 429	154 908	11 260	1 047 690	543 693	2	2	9	MN
40 378	192 325	5 042	4 811	32 737	3 757	259 435	129 664	3	3	19	MS
166 673	640 084	13 966	23 368	152 295	13 070	1 208 907	569 311	2	2	10	MO
13 312	85 781	1 698	3 144	17 727	1 041	73 898	38 946	6	6	24	MT
35 587	199 440	4 854	6 949	56 981	3 611	254 436	129 684	3	3	18	NE
23 390	319 695	6 967	3 150	48 033	3 068	266 110	143 796	2	2	15	NV
27 855	100 535	3 658	2 733	25 752	3 796	309 159	158 470	4	4	15	NH
247 352	830 128	30 415	19 895	211 192	23 788	2 167 859	1 155 305	1	1	8	NJ
26 341	165 345	3 843	4 535	29 435	3 276	205 093	111 772	5	5	18	NM
601 754	1 666 553	52 873	39 104	394 765	42 058	3 951 782	2 137 461	1	1	9	NY
160 512	853 326	25 578	47 305	383 810	21 528	1 380 772	705 150	1	2	4	NC
16 836	47 811	1 227	1 523	13 330	1 234	91 319	41 861	5	4	20	ND
318 318	1 068 000	36 563	31 659	271 145	27 187	2 017 620	1 044 399	1	1	7	OH
39 758	261 863	6 316	8 516	65 072	4 858	357 830	184 434	4	3	14	OK
80 024	423 752	10 674	8 724	57 258	4 632	377 566	199 510	3	2	13	OR
387 057	1 355 059	42 684	35 966	355 116	27 660	2 341 572	1 266 872	1	1	6	PA
17 989	66 037	1 917	(S)	12 731	1 885	172 903	83 344	4	5	(S)	RI
59 920	333 861	12 298	10 112	99 455	10 514	669 171	320 578	2	2	14	SC
7 758	57 580	1 490	2 872	18 392	1 191	76 583	39 538	7	7	28	SD
93 042	633 310	15 199	13 304	123 259	12 417	892 336	423 643	2	2	9	TN
314 126	1 732 960	54 863	40 422	325 879	36 415	2 687 530	1 341 943	1	1	7	TX
59 235	282 731	6 207	6 010	46 186	3 774	301 199	140 228	3	3	18	UT
8 401	47 553	1 629	716	10 276	1 710	129 280	67 175	8	7	21	VT
103 970	832 426	19 497	19 447	183 623	21 062	1 385 283	715 838	2	1	9	VA
162 386	864 597	28 889	18 013	142 390	8 404	756 797	417 152	2	2	7	WA
13 907	82 143	2 183	2 811	21 234	2 233	138 243	75 795	5	5	26	WV
101 650	681 884	17 018	26 425	179 486	11 208	943 910	514 494	2	1	10	WI
7 957	29 471	1 228	2 382	14 527	761	50 939	27 566	7	9	20	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	75 395	69 566	60 243	56 435	(Z)	—	1	1
Proprietors and working partners	25 759	17 982	19 761	28 698	1	2	2	2
All employees**	612 516	617 333	512 004	458 687	(Z)	(Z)	(Z)	(Z)
Construction workers:								
March	433 552	452 744	381 815	341 167	(Z)	(Z)	(Z)	(Z)
May	455 916	469 279	390 306	367 815	(Z)	(Z)	(Z)	(Z)
August	476 968	491 584	407 130	386 712	(Z)	(Z)	(Z)	(Z)
November	454 034	469 567	388 931	378 311	(Z)	(Z)	(Z)	(Z)
Average	455 117	470 793	397 548	368 993	(Z)	(Z)	(Z)	(Z)
Other employees:								
March	156 001	144 063	114 266	86 771	(Z)	(Z)	1	1
May	154 290	143 590	(NA)	(NA)	(Z)	(Z)	(NA)	(NA)
August	157 514	147 448	(NA)	(NA)	(Z)	(Z)	(NA)	(NA)
November	161 789	151 080	(NA)	(NA)	(Z)	(Z)	(NA)	(NA)
Average	157 399	146 545	(NA)	(NA)	(Z)	(Z)	(NA)	(NA)
Payroll, all employees	16 613 239	14 329 834	9 860 690	6 413 961	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	11 781 219	10 310 628	7 476 808	5 024 679	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	4 832 019	4 019 206	2 383 881	1 389 282	(Z)	(Z)	(Z)	(Z)
First-quarter payroll, all employees	3 790 655	3 297 114	2 322 105	1 401 612	(Z)	(Z)	(Z)	(Z)
Fringe benefits, all employees	4 144 076	3 124 864	1 792 827	1 191 833	(Z)	(Z)	(Z)	(Z)
Legally required expenditures	2 504 992	1 986 535	1 344 811	613 373	(Z)	(Z)	(Z)	(Z)
Voluntary expenditures	1 639 083	1 138 328	448 015	578 461	(Z)	(Z)	(Z)	(Z)
Dollar value of business done	57 667 981	50 219 653	33 521 439	21 431 185	(Z)	(Z)	(Z)	(Z)
Value of construction work	56 902 406	49 503 323	32 661 277	21 072 098	(Z)	(Z)	(Z)	(Z)
Value of construction work subcontracted in from others	29 450 247	21 987 082	14 977 848	10 895 292	1	1	(Z)	(Z)
Other business receipts	765 575	716 330	860 162	359 087	2	2	1	2
Net value of construction work†	50 755 709	44 517 739	28 846 061	19 135 815	(Z)	(Z)	(Z)	(Z)
Value added††	29 431 529	25 911 790	16 961 501	10 681 068	(Z)	(Z)	(Z)	(Z)
Selected costs	28 236 452	24 307 862	16 559 938	10 750 117	(Z)	(Z)	(Z)	(Z)
Materials, components, and supplies	21 140 903	18 556 072	12 165 599	8 495 261	(Z)	(Z)	(Z)	(Z)
Construction work subcontracted out to others	6 146 698	4 985 584	3 815 215	1 936 282	1	1	(Z)	(Z)
Selected power, fuels, and lubricants	948 852	766 206	579 123	318 575	1	1	1	1
Electricity	175 481	119 454	83 116	41 281	1	1	1	1
Natural and manufactured gas	44 015	32 481	29 861	26 118	1	1	1	1
Gasoline and diesel fuel	685 556	567 556	434 274	227 035	1	1	1	1
On highway use	624 644	519 004	(NA)	(NA)	1	(Z)	(NA)	(NA)
Off highway use	60 912	48 551	(NA)	(NA)	3	2	(NA)	(NA)
Other, including lubricating oils and greases	43 800	46 713	31 872	24 142	2	2	2	1
Rental cost for machinery, equipment, and buildings	860 629	664 587	364 921	184 692	1	1	1	1
For machinery and equipment	382 555	287 552	191 898	107 612	2	1	1	1
For buildings	478 074	377 035	173 022	77 080	1	1	1	1
Selected purchased services	925 988	596 403	392 979	259 566	1	1	1	2
Communication services	440 301	298 091	186 256	117 679	1	1	1	3
Repairs to buildings and other structures	65 354	53 347	37 877	18 505	2	2	1	2
Repairs to machinery and equipment	420 332	244 964	168 844	123 383	1	1	1	3
Ownership of construction projects:								
Value of construction work	56 902 406	49 503 323	32 661 277	21 072 098	(Z)	(Z)	(Z)	(Z)
Government owned	11 158 758	7 129 289	4 684 376	3 194 485	1	1	2	(Z)
Federal	2 886 356	2 353 812	(NA)	(NA)	2	2	(NA)	(NA)
State and local	8 272 401	4 775 476	(NA)	(NA)	1	1	(NA)	(NA)
Privately owned	45 743 649	42 374 033	27 976 900	17 877 613	1	(Z)	(Z)	(Z)

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	6 056 840	4 476 131	1	1
Capital expenditures, other than land -----	754 154	720 556	2	1
New -----	606 002	565 812	1	1
Used -----	148 153	154 744	4	3
Retirements and disposition of depreciable assets -----	273 452	196 749	6	3
End-of-year gross book value of depreciable assets -----	6 537 542	4 999 938	1	1
Depreciation charges during year -----	732 072	662 294	1	1
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	1 221 073	1 329 493	2	2
Capital expenditures, other than land -----	99 449	119 228	5	3
New buildings and other structures -----	70 981	73 396	5	4
Used buildings and other structures -----	28 468	45 831	11	6
Retirements and disposition of depreciable assets -----	29 468	42 343	8	4
End-of-year gross book value of depreciable assets -----	1 291 054	1 406 377	2	2
Depreciation charges during year -----	102 607	124 058	3	3
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	4 835 767	3 146 637	1	1
Capital expenditures, other than land -----	654 706	601 328	2	1
New machinery and equipment, including automobiles and trucks -----	535 021	492 415	2	1
New automobiles and trucks, intended primarily for highway use -----	284 543	338 010	2	2
Used machinery and equipment, including automobiles and trucks -----	119 684	108 913	4	3
Retirements and disposition of depreciable assets -----	243 984	154 405	7	3
End-of-year gross book value of depreciable assets -----	5 246 488	3 593 560	1	1
Depreciation charges during year -----	629 466	538 235	1	1

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	75 395	(Z)
Value of construction work	56 902 406	(Z)
Establishments with inventories:		
Number	39 153	1
Value of construction work	38 880 056	(Z)
Inventories ¹ :		
End of 1992, materials and supplies	1 257 932	2
End of 1991, materials and supplies	1 236 009	2
Establishments with no inventories:		
Number	17 285	1
Value of construction work	10 264 726	1
Establishments not reporting:		
Number	18 957	1
Value of construction work	7 757 624	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments	75 395	44 174	16 118	8 959	4 551	1 074	417	84	17	2
All employees**	612 516	84 002	103 618	117 945	132 766	71 601	60 456	28 031	14 097	(D)
Payroll, all employees	16 613 239	1 514 324	2 304 272	3 033 231	3 904 568	2 277 281	2 089 479	1 007 280	482 803	(D)
Dollar value of business done	57 667 981	7 085 469	8 104 976	10 283 814	13 125 027	7 622 650	6 890 156	3 250 752	1 305 137	(D)
Value of construction work	56 902 406	6 995 437	7 972 616	10 133 743	12 929 271	7 532 642	6 845 521	3 212 754	1 280 423	(D)
Net value of construction work†	50 755 709	6 644 375	7 474 133	9 311 048	11 410 059	6 453 736	5 693 395	2 725 938	1 043 025	(D)
Value added††	29 431 529	3 581 883	4 239 185	5 332 127	6 635 810	3 805 118	3 449 466	1 607 571	780 369	(D)
Cost of materials, components, supplies, and fuels	22 089 755	3 152 524	3 367 309	4 128 991	4 970 005	2 738 626	2 288 564	1 156 365	287 370	(D)
Cost of construction work subcontracted out to others	6 146 698	351 062	498 483	822 695	1 519 211	1 078 906	1 152 126	486 816	237 398	(D)
Rental cost for machinery, equipment, and buildings	860 629	114 543	138 178	161 707	181 853	97 494	88 816	45 107	32 931	(D)
Capital expenditures, other than land	754 154	135 851	126 475	146 083	159 001	67 854	52 473	31 825	34 593	(D)
End-of-year gross book value of depreciable assets	6 537 542	987 857	1 059 746	1 286 201	1 469 253	731 299	539 054	241 875	222 257	(D)
1987										
All employees**	617 333	77 420	102 309	119 018	138 718	76 706	65 658	21 794	15 707	(D)
Value of construction work	49 503 323	5 636 922	6 579 374	8 732 171	11 821 399	6 951 812	6 445 335	2 268 183	1 068 125	(D)
Value added††	25 911 790	2 927 527	3 570 519	4 770 035	6 170 715	3 562 334	3 299 591	1 054 757	556 310	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees**	(Z)	1	2	1	1	(Z)	(Z)	(Z)	(Z)	(D)
Net value of construction work†	(Z)	2	2	1	1	(Z)	(Z)	(Z)	(Z)	(D)
Capital expenditures, other than land	2	5	5	4	1	(Z)	(Z)	(Z)	(Z)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments	75 395	(S)	(S)	9 214	22 164	14 971	10 361	7 161	2 457	1 096	654
All employees**	612 516	(S)	(S)	13 008	55 312	73 011	92 280	121 783	81 114	64 739	105 227
Payroll, all employees	16 613 239	(S)	(S)	167 266	895 034	1 454 726	2 155 391	3 265 082	2 518 816	2 133 027	3 969 570
Dollar value of business done	57 667 981	(S)	(S)	688 754	3 633 660	5 300 895	7 234 455	10 755 765	8 556 850	7 490 318	13 795 499
Value of construction work	56 902 406	(S)	(S)	681 899	3 586 971	5 228 561	7 114 135	10 574 230	8 422 707	7 410 588	13 672 969
Net value of construction work†	50 755 709	(S)	(S)	661 910	3 466 321	5 021 789	6 768 493	9 773 775	7 465 523	6 292 788	11 100 767
Value added††	29 431 529	(S)	(S)	366 953	1 911 887	2 776 893	3 873 010	5 621 144	4 380 728	3 640 820	6 747 546
Cost of materials, components, supplies, and fuels	22 089 755	(S)	(S)	301 812	1 601 124	2 317 231	3 015 803	4 334 166	3 218 938	2 731 698	4 475 751
Cost of construction work subcontracted out to others	6 146 698	(S)	(S)	(S)	120 649	206 772	345 642	800 455	957 184	1 117 800	2 572 202
Rental cost for machinery, equipment, and buildings	860 629	(S)	(S)	12 721	58 526	93 824	122 395	170 740	118 766	92 608	187 536
Capital expenditures, other than land	754 154	(S)	(S)	13 597	69 479	98 251	124 685	149 580	100 606	64 078	130 849
End-of-year gross book value of depreciable assets	6 537 542	(S)	(S)	119 378	545 280	730 101	1 013 221	1 360 554	913 721	689 144	1 131 653
1987											
All employees**	617 333	(S)	(S)	(S)	60 983	79 732	89 727	120 984	82 355	71 696	90 022
Value of construction work	49 503 323	(S)	(S)	(S)	3 401 263	4 778 598	6 125 095	9 538 085	7 580 324	6 946 222	10 251 429
Value added††	25 911 790	(S)	(S)	(S)	1 816 406	2 607 880	3 395 222	5 221 579	3 889 785	3 531 234	4 981 934
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	(Z)	(S)	(S)	3	2	2	2	1	1	(Z)	(Z)
Net value of construction work†	(Z)	(S)	(S)	3	2	2	2	1	1	(Z)	(Z)
Capital expenditures, other than land	2	(S)	(S)	10	6	6	5	3	1	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	56 902 406	27 236 402	14 451 846	13 271 750	(Z)	(Z)	1	1
Building construction	50 530 263	25 069 901	13 362 302	12 098 060	(Z)	(Z)	1	1
Single-family houses	14 999 745	7 585 518	2 885 243	4 528 984	1	1	1	1
Single-family houses, detached	13 073 632	6 528 214	2 604 689	3 940 730	1	1	1	1
Single-family houses, attached, including townhouses and townhouse-type condominiums	1 926 113	1 057 304	280 554	588 254	2	4	4	3
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	2 066 054	905 651	436 571	723 831	1	2	4	2
Other residential buildings, including hotels, motels, and tourist cabins	852 875	461 511	210 757	180 607	2	2	4	5
Hotels, motels, and tourist cabins	672 948	366 129	174 755	132 064	2	2	4	6
Other residential buildings	179 927	95 382	36 002	48 543	5	6	8	9
Office buildings	6 285 859	3 022 766	1 739 066	1 524 028	1	1	1	1
Other commercial buildings such as stores, restaurants, and automobile service stations	5 961 182	2 760 469	1 346 516	1 854 196	1	1	2	2
Industrial buildings and warehouses	9 339 353	4 525 977	2 926 720	1 886 656	1	1	1	1
Industrial buildings	8 195 284	3 861 372	2 631 122	1 702 791	1	1	1	1
Warehouses	1 144 069	664 605	295 598	183 866	2	2	4	2
Religious buildings	786 950	376 416	199 065	211 469	2	3	3	2
Educational buildings	4 289 757	2 296 286	1 510 004	483 467	1	1	1	2
Hospitals and institutional buildings	5 021 324	2 635 901	1 863 664	521 759	1	1	1	1
Amusement, social, and recreational buildings, indoors	320 365	178 087	84 586	57 692	3	3	5	9
Other nonresidential buildings	606 799	321 320	160 111	125 369	2	2	5	7
Nonbuilding construction	4 429 736	2 166 502	1 089 544	1 173 690	1	1	1	1
Sewers, water mains, and related facilities	890 529	495 473	145 541	249 515	3	4	5	5
Sewers, sewer lines, septic systems, and related facilities	627 205	352 750	92 210	182 246	4	5	6	6
Water mains and related facilities	263 324	142 724	53 331	67 269	5	7	7	8
Pipeline construction other than sewer or water lines	381 764	176 541	92 315	112 908	2	2	3	4
Blast furnaces, petroleum refineries, chemical complexes, etc.	1 249 798	498 290	361 986	389 523	1	1	1	1
Power plants	742 647	236 486	213 964	292 197	1	1	2	1
Power plants, nuclear	69 963	24 470	15 766	29 727	1	2	1	(Z)
Power plants and cogeneration plants, except nuclear	672 684	212 017	198 198	262 470	1	1	2	1
Sewage treatment and water treatment plants	859 891	588 602	213 512	57 777	1	1	3	4
Sewage treatment plants	560 700	405 023	116 796	38 880	1	1	4	2
Water treatment plants	299 191	183 579	96 715	18 897	2	2	4	8
Other nonbuilding construction	305 107	171 110	62 227	71 770	4	6	6	7
Construction work, n.s.k.	1 942 408	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
1987								
Value of construction work	49 503 323	26 767 072	10 625 460	9 768 215	(Z)	(Z)	1	1
Building construction	43 233 667	24 659 468	9 686 895	8 887 309	(Z)	(Z)	1	1
Single-family houses	12 058 369	6 689 180	2 156 749	3 212 441	1	1	1	1
Single-family houses, detached	10 072 026	5 331 328	1 920 540	2 820 158	1	1	1	1
Single-family houses, attached, including townhouses and townhouse-type condominiums	1 986 343	1 357 851	236 208	392 283	2	2	5	3
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	2 900 532	1 916 529	387 692	596 311	1	1	3	2
Other residential buildings, including hotels, motels, and tourist cabins	1 812 306	1 215 243	288 092	308 970	1	1	2	3
Hotels, motels, and tourist cabins	1 256 221	936 005	163 063	157 152	1	1	1	3
Other residential buildings	556 085	279 238	125 028	151 818	3	3	4	4
Office buildings	6 904 019	4 266 382	1 562 020	1 075 616	1	1	1	1
Other commercial buildings such as stores, restaurants, and automobile service stations	5 589 589	3 100 048	1 160 695	1 328 847	1	1	1	2
Industrial buildings and warehouses	7 417 676	4 055 651	2 066 983	1 295 042	1	1	1	1
Industrial buildings	6 355 722	3 311 282	1 886 973	1 157 467	1	1	1	1
Warehouses	1 061 954	744 368	180 010	137 575	1	1	3	3
Religious buildings	618 341	290 024	144 605	183 712	2	2	2	4
Educational buildings	2 260 898	1 183 076	728 746	349 075	1	1	2	2
Hospitals and institutional buildings	2 903 744	1 564 234	992 161	347 348	1	1	1	1
Amusement, social, and recreational buildings, indoors	260 309	143 856	52 238	64 214	2	2	3	4
Other nonresidential buildings	507 884	235 245	146 914	125 733	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	3 927 080	2 107 604	938 565	880 910	1	1	1	2
Sewers, water mains, and related facilities	788 612	429 296	176 824	182 491	3	3	3	4
Sewers, sewer lines, septic systems, and related facilities	501 554	272 351	99 905	129 298	3	4	5	5
Water mains and related facilities	287 057	156 945	76 919	53 192	3	5	2	6
Pipeline construction other than sewer or water lines	284 720	152 491	69 823	62 405	3	3	4	9
Blast furnaces, petroleum refineries, chemical complexes, etc.	724 730	294 573	192 703	237 453	2	2	1	3
Power plants	754 733	406 991	178 205	169 535	1	(Z)	2	1
Power plants, nuclear	185 839	117 594	14 916	53 329	(Z)	(Z)	1	(Z)
Power plants and cogeneration plants, except nuclear	568 893	289 397	163 289	116 206	1	1	2	2
Sewage treatment and water treatment plants	797 092	540 112	213 157	43 822	3	3	5	6
Sewage treatment plants	465 831	302 067	138 906	24 856	4	5	4	6
Water treatment plants	331 261	238 044	74 251	18 966	2	2	7	11
Other nonbuilding construction	577 193	284 141	107 853	185 203	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	2 342 576	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments -----	75 395	612 516	16 613 239	56 902 406	28 088 358	50 755 709	29 431 529	6 146 698	(Z)	(Z)	1
Establishments not specializing by type -----	18 079	226 098	6 724 509	22 630 516	(NA)	19 727 213	11 530 441	2 903 303	1	1	1
Establishments specializing 51 percent or more -----	57 317	386 418	9 888 730	34 271 891	28 088 358	31 028 496	17 901 088	3 243 395	(Z)	(Z)	1
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	32 959	162 674	3 401 806	12 552 989	10 511 645	12 169 400	6 496 408	383 589	1	1	3
Establishments with —											
100 percent specialization -----	11 140	39 469	781 786	3 178 615	3 178 615	3 042 406	1 535 863	136 208	2	3	6
90 to 99 percent specialization -----	6 439	33 842	705 730	2 783 349	2 602 743	2 697 764	1 389 595	85 585	3	3	8
80 to 89 percent specialization -----	5 329	29 703	611 184	2 154 506	1 779 873	2 107 490	1 160 400	47 015	3	3	7
70 to 79 percent specialization -----	5 353	28 242	600 930	2 138 250	1 562 222	2 083 363	1 159 136	54 886	3	3	8
60 to 69 percent specialization -----	3 793	23 926	536 818	1 795 151	1 111 299	1 747 737	978 023	47 414	3	3	7
51 to 59 percent specialization -----	904	7 493	165 358	503 119	276 893	490 639	273 391	12 480	5	5	7
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	2 233	11 153	241 587	868 190	739 764	846 552	459 322	21 638	5	5	10
Establishments with —											
100 percent specialization -----	998	4 331	93 484	342 267	342 267	337 257	191 136	5 010	8	11	15
90 to 99 percent specialization -----	328	1 806	38 708	134 207	124 879	131 205	67 031	3 002	11	11	20
80 to 89 percent specialization -----	301	1 412	32 843	116 463	95 314	112 962	62 507	3 501	11	10	13
70 to 79 percent specialization -----	269	1 240	24 018	86 869	62 875	84 359	43 990	2 511	13	13	22
60 to 69 percent specialization -----	292	1 945	43 058	157 855	98 050	150 759	80 835	7 096	12	8	24
51 to 59 percent specialization -----	44	420	9 476	30 528	16 379	30 011	13 823	518	25	30	38
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type -----	1 133	8 052	209 693	714 270	554 377	643 899	366 068	70 371	5	5	8
Establishments with —											
100 percent specialization -----	234	1 438	42 131	135 824	135 824	119 189	67 164	16 635	9	8	9
90 to 99 percent specialization -----	122	935	22 691	79 242	74 233	71 467	40 790	7 775	18	13	36
80 to 89 percent specialization -----	146	1 043	24 867	91 497	74 769	81 481	50 444	*10 016	16	15	43
70 to 79 percent specialization -----	302	2 123	53 632	182 608	131 214	164 787	91 783	17 821	10	11	8
60 to 69 percent specialization -----	265	1 978	53 200	182 664	114 787	166 158	94 562	16 507	9	9	10
51 to 59 percent specialization -----	62	536	13 171	42 435	23 551	40 817	21 325	1 617	17	16	3
OFFICE BUILDINGS											
All establishments specializing in type -----	1 745	26 165	845 670	2 728 036	2 046 548	2 383 446	1 473 574	344 591	2	1	2
Establishments with —											
100 percent specialization -----	434	5 855	180 873	563 050	563 050	497 453	313 325	65 597	5	3	3
90 to 99 percent specialization -----	106	1 196	44 365	163 941	152 210	131 886	79 097	32 055	8	6	8
80 to 89 percent specialization -----	300	2 961	94 904	313 515	256 125	274 848	177 344	38 667	6	4	3
70 to 79 percent specialization -----	303	4 933	165 976	536 227	392 143	463 857	289 940	72 370	4	4	4
60 to 69 percent specialization -----	434	7 562	228 993	726 705	451 318	648 917	387 294	77 788	3	3	5
51 to 59 percent specialization -----	169	3 659	130 559	424 598	231 702	366 484	226 574	58 114	3	2	3
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	4 221	33 440	901 639	3 050 120	2 493 084	2 797 919	1 668 817	252 201	2	2	4
Establishments with —											
100 percent specialization -----	1 391	10 940	323 164	1 069 907	1 069 907	983 657	568 191	86 250	4	4	7
90 to 99 percent specialization -----	552	3 367	81 125	278 668	259 172	259 537	154 681	19 130	8	7	8
80 to 89 percent specialization -----	518	4 324	103 971	366 319	301 287	339 781	199 967	26 538	8	7	10
70 to 79 percent specialization -----	644	5 403	143 253	516 035	372 793	459 973	275 141	56 062	6	5	9
60 to 69 percent specialization -----	776	6 411	167 505	562 282	348 610	517 026	330 952	45 256	5	5	10
51 to 59 percent specialization -----	340	2 995	82 620	256 909	141 315	237 944	139 884	18 965	7	6	3
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	2 330	51 153	1 664 243	5 191 193	4 215 396	4 437 875	2 764 275	753 318	1	1	1
Establishments with —											
100 percent specialization -----	886	19 829	610 302	1 892 039	1 892 039	1 637 427	1 017 222	254 612	2	2	3
90 to 99 percent specialization -----	320	4 213	129 926	406 737	378 909	355 929	212 777	50 808	3	3	3
80 to 89 percent specialization -----	252	5 191	188 332	557 125	461 109	470 181	305 118	86 944	3	3	3
70 to 79 percent specialization -----	323	7 637	268 120	846 203	614 357	714 382	440 793	131 821	2	2	2
60 to 69 percent specialization -----	401	7 959	264 563	868 119	534 881	731 597	439 535	136 523	3	2	3
51 to 59 percent specialization -----	148	6 324	203 001	620 969	334 102	528 360	348 831	92 609	2	2	2
WAREHOUSES											
All establishments specializing in type -----	178	1 675	58 702	207 453	161 412	169 875	93 459	37 578	9	8	4
Establishments with —											
100 percent specialization -----	32	430	14 227	62 660	62 660	56 853	27 040	5 807	20	19	21
90 to 99 percent specialization -----	9	112	(D)	(D)	(D)	(D)	(D)	(D)	21	(D)	(D)
80 to 89 percent specialization -----	(S)	168	(D)	(D)	(D)	(D)	(D)	(D)	13	(D)	(D)
70 to 79 percent specialization -----	*20	164	4 866	16 790	11 918	15 959	9 265	*830	28	34	43
60 to 69 percent specialization -----	46	241	8 124	21 330	13 238	18 963	12 593	2 368	33	27	30
51 to 59 percent specialization -----	(S)	560	21 343	60 678	33 270	50 681	26 310	9 997	12	10	3

10-10 PLUMBING, HEATING, AND AIR-CONDITIONING

CONSTRUCTION—INDUSTRY SERIES

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992—Con.

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
EDUCATIONAL BUILDINGS											
All establishments specializing in type	1 054	14 910	446 416	1 867 702	1 337 351	1 462 960	778 529	404 742	3	2	4
Establishments with —											
100 percent specialization	158	751	22 929	125 234	125 234	87 363	49 439	37 871	13	16	34
90 to 99 percent specialization	96	1 379	34 271	151 895	142 701	120 933	57 410	30 962	12	9	10
80 to 89 percent specialization	166	2 238	66 987	321 705	265 678	243 753	123 122	77 952	7	6	8
70 to 79 percent specialization	182	2 745	78 045	324 719	235 211	249 122	130 313	75 597	6	6	10
60 to 69 percent specialization	266	5 331	163 663	640 547	401 258	518 404	283 436	122 143	4	3	4
51 to 59 percent specialization	186	2 467	80 520	303 603	167 270	243 386	134 807	60 217	6	5	7
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type	684	14 866	485 815	1 980 961	1 440 473	1 477 475	825 630	503 486	2	2	2
Establishments with —											
100 percent specialization	127	1 577	42 442	204 537	204 537	138 800	76 348	65 737	13	9	12
90 to 99 percent specialization	100	1 061	34 407	136 769	126 516	103 053	62 210	33 716	8	6	4
80 to 89 percent specialization	88	1 979	68 258	293 608	244 282	221 928	130 620	71 680	6	4	4
70 to 79 percent specialization	168	3 841	127 784	484 897	348 502	386 158	219 503	98 740	5	4	3
60 to 69 percent specialization	145	4 215	141 884	616 166	380 513	420 360	225 404	195 806	4	3	2
51 to 59 percent specialization	55	2 192	71 040	244 983	136 123	207 176	111 544	37 807	3	2	2
SEWERS, SEWER LINES, SEPTIC SYSTEMS, AND RELATED FACILITIES											
All establishments specializing in type	1 326	4 708	89 695	349 151	318 621	332 747	207 073	16 404	7	7	14
Establishments with —											
100 percent specialization	967	3 360	58 819	228 328	228 328	218 589	131 114	(S)	9	8	(S)
90 to 99 percent specialization	76	367	7 291	23 321	21 849	22 195	15 844	*1 126	33	35	45
80 to 89 percent specialization	94	202	3 174	19 677	16 064	19 199	11 070	*478	28	28	51
70 to 79 percent specialization	67	325	9 309	38 639	28 545	34 803	23 458	3 836	22	19	14
60 to 69 percent specialization	100	363	9 386	35 067	21 524	33 908	20 869	*1 159	20	23	47
51 to 59 percent specialization	21	*91	*1 716	*4 120	*2 311	*4 053	*4 719	(S)	54	47	(S)
PIPELINE CONSTRUCTION OTHER THAN SEWER OR WATER LINES											
All establishments specializing in type	104	2 511	81 542	227 822	191 747	202 088	143 243	25 733	5	3	4
Establishments with —											
100 percent specialization	67	1 155	38 728	109 569	109 569	97 568	68 631	12 002	7	5	8
90 to 99 percent specialization	3	115	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)
80 to 89 percent specialization	10	506	13 738	28 402	23 421	24 692	20 229	3 710	(Z)	(Z)	(Z)
70 to 79 percent specialization	5	179	(D)	(D)	(D)	15 099	(D)	(D)	12	(D)	(D)
60 to 69 percent specialization	*16	282	8 558	29 044	18 061	25 616	13 495	3 428	30	18	2
51 to 59 percent specialization	4	274	9 368	32 404	18 086	(D)	20 812	(D)	(Z)	(Z)	(D)
BLAST FURNACES, PETROLEUM REFINERIES, CHEMICAL COMPLEXES, ETC.											
All establishments specializing in type	152	11 042	424 970	1 056 640	914 049	908 526	682 682	148 115	1	1	3
Establishments with —											
100 percent specialization	85	2 649	108 282	270 848	270 848	237 625	181 314	33 223	4	4	11
90 to 99 percent specialization	19	3 663	138 927	309 844	294 229	263 519	196 873	46 325	1	(Z)	(Z)
80 to 89 percent specialization	14	905	33 176	83 284	70 422	73 930	58 262	9 354	(Z)	(Z)	(Z)
70 to 79 percent specialization	21	3 236	121 450	328 887	241 993	279 399	204 499	49 488	(Z)	(Z)	(Z)
60 to 69 percent specialization	10	407	(D)	35 479	21 391	30 138	22 085	5 341	5	5	2
51 to 59 percent specialization	4	181	(D)	28 299	15 167	23 915	19 649	4 384	8	13	24
POWER PLANTS AND COGENERATION PLANTS, EXCEPT NUCLEAR											
All establishments specializing in type	75	4 235	165 618	425 250	332 697	371 100	289 923	54 150	2	1	1
Establishments with —											
100 percent specialization	45	841	29 222	83 673	83 673	75 668	49 360	8 005	7	6	5
90 to 99 percent specialization	6	646	23 651	65 235	62 801	(D)	42 573	(D)	2	2	(D)
80 to 89 percent specialization	5	600	26 646	67 389	53 911	64 134	56 391	3 255	(Z)	(Z)	(Z)
70 to 79 percent specialization	7	1 326	53 122	115 121	81 281	102 190	85 209	12 931	2	1	(Z)
60 to 69 percent specialization	3	204	8 986	25 731	15 439	(D)	12 981	(D)	(Z)	(Z)	(D)
51 to 59 percent specialization	9	619	23 990	68 102	35 593	55 175	43 409	12 927	3	4	5

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	75 395	455 117	433 552	455 916	476 968	454 034	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Alabama	1 140	8 328	7 806	8 298	8 782	8 426	3	2	2	3	4	2
Alaska	175	783	693	745	885	807	6	6	8	7	6	7
Arizona	1 085	7 210	6 792	7 079	7 636	7 332	3	3	3	3	3	3
Arkansas	695	4 109	3 802	4 358	4 287	3 989	3	4	4	4	4	4
California	6 998	40 972	40 715	41 766	42 395	39 012	1	1	1	1	1	1
Colorado	1 232	7 457	6 797	7 487	7 851	7 695	3	3	2	3	3	3
Connecticut	1 236	5 448	5 092	5 241	5 758	5 704	2	3	2	3	3	4
Delaware	233	1 854	1 699	1 788	1 965	1 964	8	6	4	6	7	7
District of Columbia	39	957	938	967	1 013	910	10	4	4	5	3	2
Florida	4 584	26 905	25 543	27 002	28 030	27 046	1	1	1	1	1	1
Georgia	2 029	13 017	12 648	12 922	13 628	12 872	2	2	2	2	2	2
Hawaii	251	1 877	1 872	1 893	1 842	1 902	4	3	3	3	4	4
Idaho	396	2 360	2 206	2 239	2 535	2 458	3	5	5	5	5	6
Illinois	3 534	22 344	20 874	22 327	23 869	22 305	2	1	1	2	2	2
Indiana	1 634	13 060	12 346	12 944	13 841	13 108	3	2	2	2	2	2
Iowa	925	5 147	4 812	5 349	5 342	5 085	3	2	2	2	2	2
Kansas	885	4 621	4 411	4 666	4 805	4 600	4	3	3	3	3	3
Kentucky	1 092	7 244	6 938	7 291	7 624	7 124	3	2	3	2	2	3
Louisiana	1 006	6 006	5 860	6 089	6 164	5 909	3	2	2	2	2	2
Maine	495	1 607	1 382	1 581	1 876	1 589	4	5	5	5	4	6
Maryland	1 752	13 654	13 292	13 681	14 247	13 395	2	2	2	2	2	2
Massachusetts	1 915	8 747	8 391	8 724	8 836	9 036	2	2	2	3	2	2
Michigan	2 641	14 150	13 027	14 015	15 711	13 847	2	2	2	2	2	2
Minnesota	1 305	8 619	7 869	8 346	9 238	9 024	3	2	2	2	2	2
Mississippi	590	3 411	3 282	3 450	3 587	3 327	3	3	3	3	3	3
Missouri	1 698	9 488	8 816	9 287	9 679	10 171	2	2	2	2	2	2
Montana	277	973	910	993	1 052	936	5	5	5	6	6	7
Nebraska	621	3 542	3 427	3 636	3 618	3 487	4	3	3	3	3	3
Nevada	370	3 070	2 736	2 930	3 202	3 413	4	2	3	2	2	3
New Hampshire	430	1 735	1 567	1 796	1 828	1 750	4	4	4	4	4	5
New Jersey	3 031	13 087	12 344	13 239	13 520	13 248	1	1	1	2	2	2
New Mexico	498	2 538	2 330	2 567	2 704	2 550	5	5	5	6	6	6
New York	5 026	26 743	25 981	26 561	28 103	26 326	1	1	1	1	1	1
North Carolina	2 541	19 708	18 292	19 836	20 766	19 937	2	1	1	1	2	1
North Dakota	221	1 087	960	1 083	1 203	1 104	5	6	6	6	6	6
Ohio	3 138	20 635	19 534	20 405	21 471	21 132	2	1	1	2	1	2
Oklahoma	957	3 853	3 685	3 988	4 103	3 636	3	4	4	4	4	4
Oregon	802	5 266	5 531	5 171	5 440	4 925	3	3	2	3	3	3
Pennsylvania	3 459	23 889	22 337	23 463	25 424	24 331	1	1	1	1	1	1
Rhode Island	328	1 151	1 024	1 115	1 270	1 193	4	4	5	5	4	5
South Carolina	1 145	7 475	7 168	7 754	7 636	7 342	2	2	2	4	2	2
South Dakota	244	1 026	895	1 046	1 097	1 063	7	7	7	7	8	8
Tennessee	1 318	10 521	10 047	10 477	10 857	10 702	3	2	2	2	2	2
Texas	4 629	26 938	25 948	27 641	28 351	25 813	1	1	1	1	1	1
Utah	575	3 485	3 242	3 478	3 764	3 458	3	3	3	3	4	3
Vermont	261	769	720	816	791	747	4	8	8	8	8	9
Virginia	2 168	13 953	13 426	14 116	14 299	13 972	2	2	2	2	2	2
Washington	1 469	10 481	10 619	10 474	10 673	10 157	3	2	2	2	2	3
West Virginia	399	2 036	1 861	1 943	2 212	2 125	3	5	5	5	5	5
Wisconsin	1 734	11 119	10 454	11 224	11 460	11 339	2	2	2	2	2	2
Wyoming	192	662	610	627	699	711	6	7	8	7	7	9

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	56 902 406	75 207	52 854 621	8 689	4 047 785	49 503 324	14.9	(Z)	(Z)	1
Alabama-----	785 735	1 139	718 023	188	67 712	631 372	24.4	2	2	4
Alaska -----	178 613	175	155 023	28	23 589	126 119	41.6	5	6	4
Arizona -----	789 710	1 075	770 414	44	19 296	779 058	1.4	2	2	9
Arkansas -----	381 622	692	347 473	81	34 149	258 711	47.5	4	4	7
California -----	5 964 074	6 997	5 856 610	191	107 464	6 050 058	-1.4	1	1	4
Colorado -----	912 817	1 231	880 649	71	32 168	642 080	42.2	2	3	3
Connecticut -----	885 033	1 235	762 886	169	122 147	943 951	-6.2	2	2	1
Delaware -----	249 510	233	177 394	160	72 116	209 466	19.1	4	5	3
District of Columbia -----	292 826	(S)	84 806	355	208 020	322 183	-9.1	2	3	2
Florida -----	2 943 006	4 583	2 859 356	152	83 650	2 843 892	3.5	1	1	3
Georgia -----	1 487 802	2 010	1 326 714	302	161 088	1 505 509	-1.2	2	2	3
Hawaii -----	369 858	251	331 053	35	38 805	227 385	62.7	3	3	1
Idaho -----	284 843	396	242 793	86	42 050	141 715	101.0	4	5	1
Illinois -----	3 175 878	3 534	2 965 754	282	210 124	2 707 387	17.3	1	2	1
Indiana -----	1 513 342	1 632	1 400 829	261	112 513	1 120 209	35.1	1	2	3
Iowa -----	613 937	910	571 620	135	42 317	368 550	66.6	2	2	3
Kansas -----	585 258	885	483 090	190	102 168	509 764	14.8	3	3	3
Kentucky -----	789 406	1 092	661 396	261	128 010	572 253	37.9	2	2	4
Louisiana -----	666 347	1 006	634 228	64	32 119	473 611	40.7	2	2	1
Maine -----	220 567	495	185 994	86	34 573	224 326	-1.7	4	5	5
Maryland -----	1 439 477	1 732	1 337 356	274	102 121	1 386 179	3.8	1	1	3
Massachusetts -----	1 239 265	1 904	1 172 360	203	66 904	1 577 616	-21.4	2	2	6
Michigan -----	1 992 593	2 641	1 928 942	154	63 651	1 764 928	12.9	1	1	3
Minnesota -----	1 168 742	1 303	1 128 094	138	40 648	1 024 134	14.1	2	2	5
Mississippi -----	376 327	590	309 188	177	67 139	242 424	55.2	4	4	17
Missouri -----	1 100 086	1 698	1 010 280	225	89 806	1 041 497	5.6	2	2	3
Montana -----	137 316	277	123 211	48	14 104	89 944	52.7	5	6	18
Nebraska -----	356 028	616	341 507	63	14 521	237 583	49.9	3	3	6
Nevada -----	440 427	366	396 482	112	43 945	280 798	56.8	2	2	5
New Hampshire -----	213 142	429	166 900	150	46 242	329 579	-35.3	4	5	3
New Jersey -----	1 985 598	3 012	1 838 948	395	146 650	2 268 884	-12.5	1	1	3
New Mexico -----	262 309	482	231 948	64	30 361	225 078	16.5	4	4	8
New York -----	3 980 283	5 020	3 845 247	339	135 036	3 891 647	2.3	1	1	5
North Carolina -----	1 849 284	2 541	1 720 153	284	129 131	1 318 179	40.3	2	2	3
North Dakota -----	150 001	221	(D)	35	(D)	91 419	64.1	3	(D)	(D)
Ohio -----	2 557 912	3 137	2 424 712	289	133 200	1 856 554	37.8	1	1	3
Oklahoma -----	437 115	956	413 434	81	23 681	353 946	23.5	3	3	22
Oregon -----	664 993	793	610 114	95	54 879	336 541	97.6	2	2	2
Pennsylvania -----	2 925 767	3 455	2 781 317	450	144 450	2 244 509	30.4	1	1	3
Rhode Island -----	172 896	328	152 244	90	20 652	152 133	13.6	5	5	6
South Carolina -----	761 076	1 140	635 023	246	126 053	671 086	13.4	2	2	1
South Dakota -----	104 464	244	94 024	83	10 441	76 225	37.0	7	8	13
Tennessee -----	1 051 857	1 318	970 862	202	80 995	868 468	21.1	2	2	4
Texas -----	3 153 087	4 605	3 048 528	163	104 559	2 559 131	23.2	1	1	6
Utah -----	376 392	575	355 933	24	20 458	276 064	36.3	4	4	2
Vermont -----	104 974	261	86 291	53	18 683	131 223	-20.0	7	8	5
Virginia -----	1 497 297	2 163	1 257 361	467	239 936	1 607 260	-6.8	1	2	3
Washington -----	1 487 746	1 468	1 322 626	183	165 120	767 183	93.9	2	2	2
West Virginia -----	284 717	399	174 704	203	110 013	191 178	48.9	3	5	1
Wisconsin -----	1 440 074	1 734	1 367 860	174	72 214	920 086	56.5	1	1	8
Wyoming -----	100 980	192	(D)	81	(D)	64 221	57.2	7	(D)	(D)

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	57 667 981	50 219 653	(Z)	(Z)
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS				
General building contractor	52 098	142 723	9	6
SPECIAL TRADE CONTRACTORS				
Building sprinkler system installation contractor	2 843 249	1 958 583	1	1
Electric power installation and service contractor, including lighting	437 805	(NA)	3	(NA)
Energy management contractor	215 913	100 930	7	7
Heating, ventilation and air-conditioning contractor	20 854 668	18 460 062	1	1
Lawn sprinkler system installation contractor	358 972	317 426	6	5
Mechanical contractor	11 406 263	9 045 153	1	1
Plumbing contractor	14 271 492	13 405 954	1	1
Refrigeration contractor	1 577 949	1 182 185	2	3
Septic system installation contractor	489 709	445 401	5	5
Sheet metal contractor	1 423 839	987 800	1	1
Steam fitting and piping contractor	1 878 263	2 007 749	1	1
Other construction activities	812 522	1 031 743	3	4
OTHER BUSINESS ACTIVITIES				
Retail trade	370 194	297 014	3	3
Wholesale trade	94 464	63 527	4	4
Other business activities	266 692	346 519	4	(NA)
Kind of business activity, n.s.k.	313 890	426 884	4	5

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	8.1	8.9	(Z)
Number of construction workers	6.0	6.8	(Z)
Number of all other employees	2.1	2.1	(Z)
Payroll, all employees \$1,000 ..	220.3	206.0	(Z)
Payroll, construction workers do ..	156.3	148.2	(Z)
Payroll, other employees do ..	64.1	57.8	(Z)
Dollar value of business done do ..	764.9	721.9	(Z)
Value of construction work do ..	754.7	711.6	(Z)
Cost of materials, components, supplies, and fuels do ..	293.0	277.8	(Z)
Construction work subcontracted to others do ..	81.5	71.7	1
Rental cost for machinery, equipment, and buildings do ..	11.4	9.6	1
Capital expenditures, other than land do ..	10.0	10.4	2
Gross book value of depreciable assets do ..	86.7	71.9	1
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	27.1	23.2	(Z)
Dollar value of business done do ..	94.1	81.3	(Z)
Value added†† do ..	48.1	42.0	(Z)
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	25.9	21.9	(Z)
Value of construction work do ..	125.0	105.1	(Z)
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	30.7	27.4	(Z)
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.292	.289	(Z)
Cost of materials, components, supplies, and fuels do ..	.388	.390	(Z)
Cost of construction work subcontracted out to others do ..	.108	.101	1
Value of construction work subcontracted in from others do ..	.518	.444	1
Rental cost for machinery, equipment, and buildings do ..	.015	.013	1

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	8.1	27.1	125.0	.292	.388	.108	.518	.015
Alabama -----	9.4	22.3	96.1	.297	.410	.071	.499	.013
Alaska -----	6.3	34.5	208.9	.235	.392	.201	.688	.013
Arizona -----	8.7	22.6	109.5	.270	.451	.059	.692	.019
Arkansas -----	7.5	20.6	93.6	.279	.424	.091	.537	.018
California -----	7.9	32.2	145.4	.300	.369	.077	.636	.020
Colorado -----	8.1	26.0	122.1	.284	.417	.112	.666	.017
Connecticut -----	6.2	31.2	146.0	.300	.368	.126	.456	.014
Delaware -----	10.6	25.4	106.0	.319	.348	.132	.477	.022
District of Columbia -----	32.2	32.7	111.2	.384	.331	.098	.514	.018
Florida -----	8.1	21.6	108.2	.273	.432	.090	.535	.015
Georgia -----	8.5	22.7	110.3	.273	.412	.122	.489	.013
Hawaii -----	10.8	37.5	176.4	.308	.386	.098	.693	.024
Idaho -----	7.9	22.7	113.3	.266	.455	.064	.676	.009
Illinois -----	8.7	32.1	139.0	.319	.363	.093	.472	.013
Indiana -----	10.8	28.9	118.9	.327	.361	.114	.487	.020
Iowa -----	7.5	24.9	118.3	.284	.397	.112	.439	.012
Kansas -----	7.3	24.7	128.9	.268	.420	.088	.428	.013
Kentucky -----	8.6	21.2	99.4	.275	.436	.108	.530	.014
Louisiana -----	8.0	22.8	111.8	.274	.427	.118	.483	.016
Maine -----	4.7	22.5	119.4	.272	.377	.102	.359	.019
Maryland -----	10.5	27.8	129.8	.289	.360	.161	.571	.014
Massachusetts -----	6.3	31.2	149.3	.287	.354	.151	.474	.015
Michigan -----	7.4	29.1	138.9	.288	.377	.127	.489	.013
Minnesota -----	9.0	32.2	145.0	.302	.360	.130	.513	.011
Mississippi -----	7.5	21.4	109.0	.255	.459	.109	.517	.014
Missouri -----	7.4	28.4	126.4	.298	.369	.139	.534	.012
Montana -----	4.8	25.4	129.8	.270	.419	.105	.679	.013
Nebraska -----	7.8	23.7	112.2	.288	.431	.090	.502	.012
Nevada -----	10.8	29.8	132.7	.292	.417	.057	.785	.017
New Hampshire -----	5.7	26.9	126.7	.298	.387	.127	.457	.017
New Jersey -----	6.0	32.9	150.1	.304	.351	.126	.423	.015
New Mexico -----	6.7	19.7	96.1	.267	.389	.108	.678	.016
New York -----	7.4	30.7	151.0	.283	.349	.149	.413	.013
North Carolina -----	10.0	22.8	100.6	.292	.434	.081	.430	.013
North Dakota -----	6.2	25.2	118.1	.270	.433	.131	.373	.010
Ohio -----	8.9	26.6	123.4	.291	.382	.125	.420	.014
Oklahoma -----	5.5	20.7	112.2	.251	.455	.092	.606	.015
Oregon -----	8.8	29.6	132.5	.299	.405	.115	.607	.015
Pennsylvania -----	9.1	29.8	127.9	.306	.360	.127	.443	.014
Rhode Island -----	4.9	28.9	145.7	.276	.377	.107	.394	.011
South Carolina -----	8.6	20.8	91.9	.297	.435	.087	.486	.018
South Dakota -----	5.7	20.3	104.5	.263	.445	.072	.537	.014
Tennessee -----	10.3	22.2	103.6	.277	.433	.085	.581	.014
Texas -----	7.8	24.3	118.7	.275	.417	.098	.542	.017
Utah -----	7.8	25.0	122.9	.262	.414	.138	.660	.014
Vermont -----	4.1	22.2	117.0	.262	.395	.093	.529	.018
Virginia -----	8.5	23.2	98.5	.312	.426	.076	.606	.014
Washington -----	9.7	31.2	138.7	.306	.374	.112	.595	.020
West Virginia -----	6.6	19.3	96.7	.260	.414	.071	.417	.011
Wisconsin -----	8.6	29.4	128.4	.307	.377	.071	.477	.012
Wyoming -----	4.6	22.8	121.9	.248	.430	.099	.365	.015

Appendix A.

Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

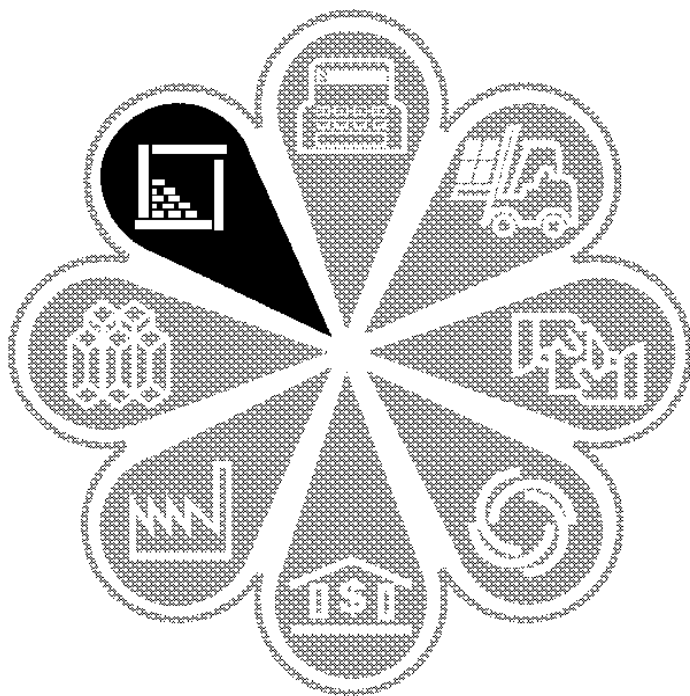
Census of Construction Industries

CC92-I-11

INDUSTRY SERIES

Painting and Paper Hanging Special Trade Contractors

Industry 1721



1992 Census of Construction Industries

CC92-I-11

INDUSTRY SERIES

Painting and Paper Hanging Special Trade Contractors

Industry 1721

Issued May 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Juliana Van Berkum**, **Susan L. Hostetter**, **Doris M. Kling**, **Carolyn J. Stone**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke**. Under the direction of **C. Lloyd Anderson**, the Systems Support Staff maintained the small computers and assisted in the management of computer output.

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Summary of Findings

Establishments classified in this industry are primarily engaged in interior and exterior painting (except roofs), and paper hanging. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$8.74 billion in total dollar value of business. Of this amount, \$8.69 billion were for the value of construction work. These establishments paid out \$2.1 billion for materials, components, and supplies and \$595 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$181 million. Value added for 1992 was \$5.9 billion.

There were 31,920 establishments with total employment averaging 162,587 during the year. Total payroll for 1992 was \$3.2 billion.

Larger establishments with 20 employees or more, while representing only 4 percent of the total number of employer establishments in this industry, accounted for 39 percent of all business done.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

A “construction establishment” is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

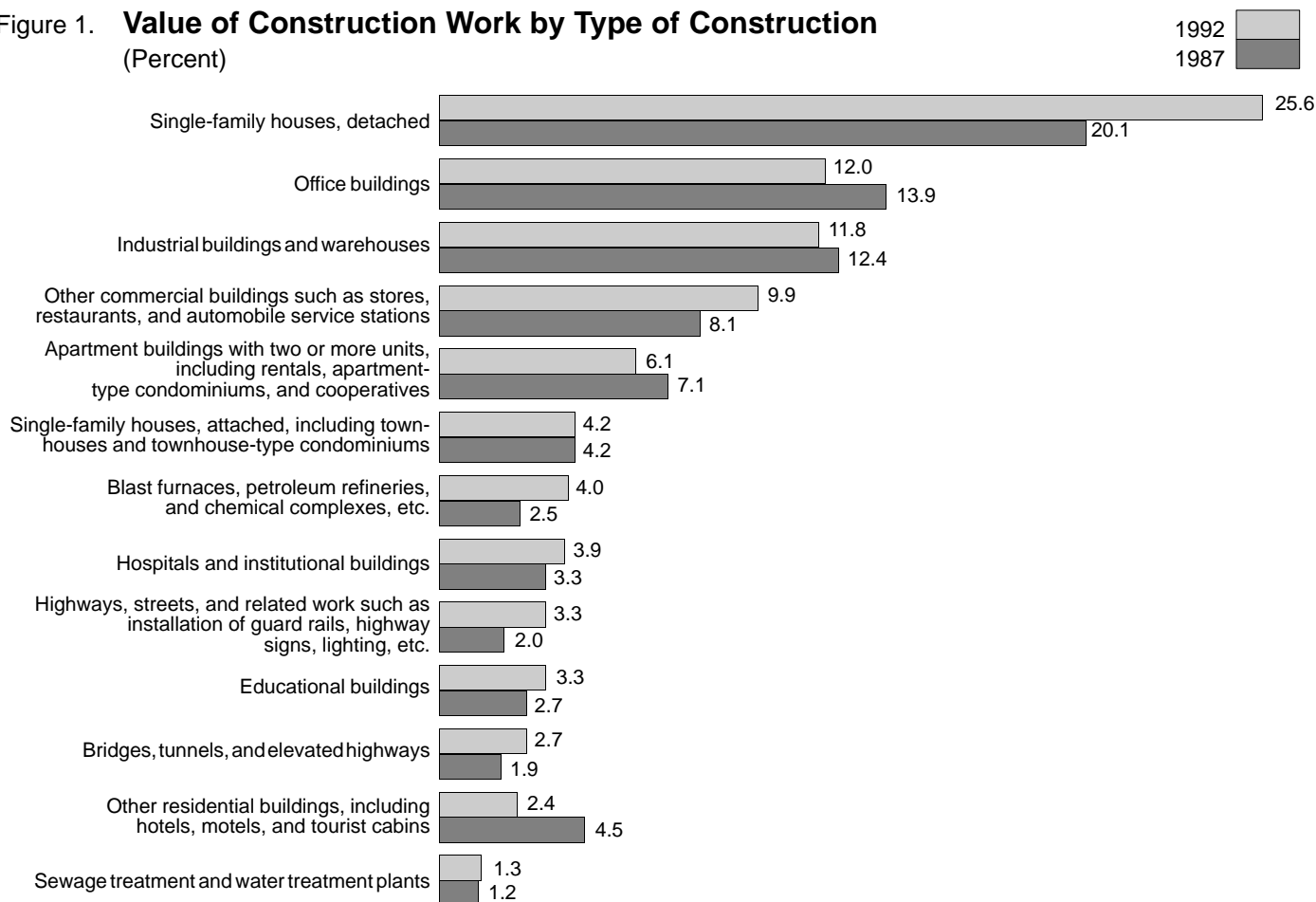


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

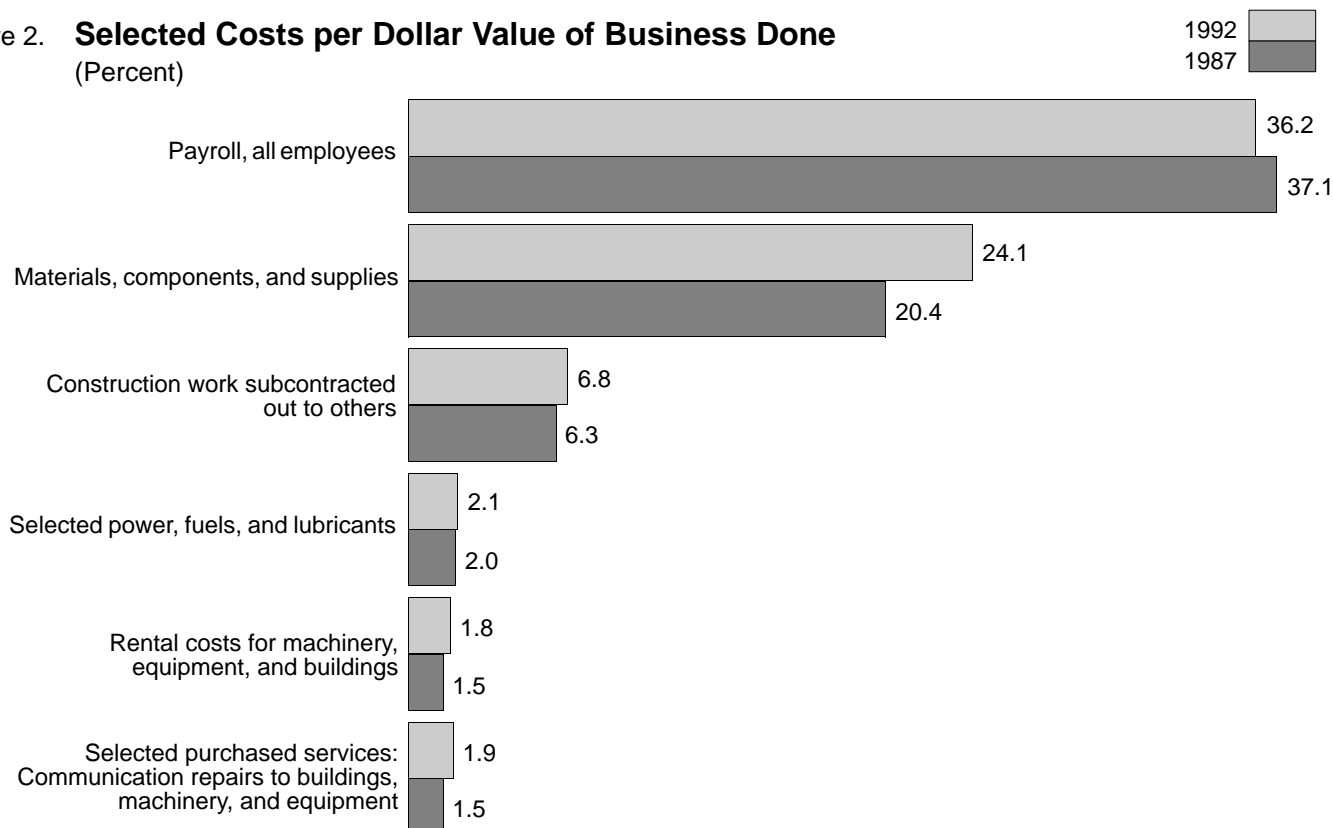


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	31 920	162 587	136 427	3 164 065	2 470 237	8 689 828	8 094 749	5 854 779	2 289 916
Alabama -----	374	2 575	2 127	48 723	35 993	129 873	119 110	85 163	34 717
Alaska -----	105	437	372	9 852	7 904	30 462	28 204	21 092	7 572
Arizona -----	511	3 305	2 734	54 461	42 188	151 525	143 802	98 005	46 953
Arkansas -----	187	1 057	901	17 285	14 224	51 723	46 322	33 087	13 339
California -----	4 099	19 574	16 304	409 128	315 842	1 163 246	1 108 605	789 780	319 411
Colorado -----	647	3 048	2 657	51 009	42 501	143 507	133 201	88 968	44 356
Connecticut -----	542	1 948	1 629	42 674	33 390	113 843	108 973	84 908	24 174
Delaware -----	128	542	448	9 683	7 248	22 946	20 805	16 449	4 401
District of Columbia -----	16	243	208	(D)	4 823	15 447	(D)	10 933	(D)
Florida -----	1 977	9 487	7 612	156 223	118 632	465 632	429 659	294 264	137 004
Georgia -----	628	4 153	3 516	79 151	60 857	237 998	202 945	146 136	57 185
Hawaii -----	162	1 539	1 273	47 034	36 631	112 046	103 754	76 558	27 272
Idaho -----	191	532	466	7 879	6 631	25 904	25 238	17 543	7 695
Illinois -----	1 351	6 852	5 665	177 844	141 410	419 478	394 352	296 801	99 412
Indiana -----	757	4 243	3 518	81 247	63 608	223 245	203 652	149 114	56 010
Iowa -----	362	1 509	1 324	26 071	21 427	73 411	69 025	51 306	18 138
Kansas -----	312	1 334	1 171	23 698	19 227	63 385	60 301	44 627	(D)
Kentucky -----	361	2 124	1 796	32 709	25 979	102 628	88 524	59 773	29 211
Louisiana -----	291	3 561	3 099	69 397	55 647	180 269	167 479	123 719	44 760
Maine -----	171	586	482	8 636	7 169	25 514	24 616	18 420	6 428
Maryland -----	762	4 906	4 244	90 690	68 677	221 997	205 673	148 236	59 361
Massachusetts -----	712	3 055	2 539	61 771	48 154	163 573	154 155	117 088	37 418
Michigan -----	926	4 507	3 668	91 685	71 233	263 413	244 661	175 093	72 096
Minnesota -----	466	2 321	1 881	58 109	45 144	157 873	147 156	106 474	41 294
Mississippi -----	211	924	811	13 603	11 515	36 596	35 098	27 201	(D)
Missouri -----	774	3 533	2 994	79 394	62 275	189 948	185 397	135 808	50 537
Montana -----	114	442	359	7 118	5 639	22 487	21 351	16 175	6 669
Nebraska -----	194	909	773	15 610	12 399	45 564	43 032	32 253	10 827
Nevada -----	140	796	641	16 583	13 049	45 449	43 678	29 536	14 201
New Hampshire -----	183	524	435	8 019	6 390	25 931	22 945	16 529	(D)
New Jersey -----	1 049	4 130	3 523	89 769	70 937	250 453	232 508	175 312	60 299
New Mexico -----	158	583	511	8 313	6 846	24 508	23 849	16 788	7 085
New York -----	2 092	11 155	9 382	242 732	190 233	644 565	605 022	452 106	154 882
North Carolina -----	1 132	4 961	4 084	79 570	61 324	217 098	199 202	144 822	57 273
North Dakota -----	72	367	319	6 681	5 717	20 586	19 841	13 896	6 415
Ohio -----	1 369	6 549	5 405	125 592	96 895	359 890	336 004	244 206	96 910
Oklahoma -----	306	1 278	1 082	21 934	17 345	64 939	59 922	43 530	16 395
Oregon -----	480	2 029	1 684	35 097	28 204	94 838	92 175	63 081	29 310
Pennsylvania -----	1 372	7 370	6 192	149 253	118 498	401 497	385 310	274 464	114 334
Rhode Island -----	186	546	449	9 342	7 173	26 041	23 583	18 162	5 430
South Carolina -----	475	2 169	1 824	32 070	25 412	92 974	83 960	59 892	24 601
South Dakota -----	106	412	336	6 103	4 834	19 153	18 415	12 822	5 615
Tennessee -----	405	2 598	2 166	46 639	34 363	124 509	117 014	82 707	34 587
Texas -----	1 613	12 448	10 846	224 309	174 970	666 612	583 410	417 755	167 913
Utah -----	234	1 104	918	16 532	13 796	52 127	50 823	36 432	16 037
Vermont -----	139	421	362	6 335	5 507	16 224	15 719	11 533	4 185
Virginia -----	1 156	5 554	4 640	97 665	74 945	256 904	234 934	172 663	63 074
Washington -----	1 000	4 482	3 825	88 817	68 640	233 275	225 634	160 423	65 962
West Virginia -----	95	294	262	5 467	4 224	13 906	13 608	10 342	(D)
Wisconsin -----	748	3 283	2 713	65 853	51 056	173 822	167 517	124 027	48 324
Wyoming -----	79	290	254	(D)	3 509	10 992	(D)	8 775	(D)

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
595 079	4 487 597	158 190	144 930	1 084 015	169 968	7 953 323	5 716 473	1	1	3	U.S.
10 762	79 193	3 319	2 484	20 003	2 277	103 009	70 047	6	5	22	AL
2 259	18 860	240	965	6 304	263	20 807	14 909	10	8	24	AK
7 723	107 380	1 962	4 082	17 723	2 682	99 106	71 477	7	6	23	AZ
5 401	23 002	640	1 061	4 914	713	35 463	24 939	11	11	31	AR
54 642	676 339	24 787	17 280	120 960	21 370	1 144 368	836 719	2	2	9	CA
10 305	88 721	1 473	3 288	14 598	2 323	100 452	69 868	5	5	20	CO
4 870	44 964	1 518	1 813	13 783	3 457	178 456	125 084	4	5	31	CT
2 141	11 550	291	*370	2 343	462	25 393	19 352	14	12	41	DE
(D)	(D)	(D)	(D)	1 556	268	17 454	13 356	(Z)	(D)	(D)	DC
35 973	248 541	10 538	6 826	52 642	10 776	400 418	271 441	4	4	15	FL
35 053	134 103	4 643	2 836	29 687	4 142	183 033	128 760	5	6	16	GA
8 292	63 721	1 967	937	14 917	1 295	83 159	65 566	5	3	16	HI
666	16 293	348	*705	3 442	224	8 146	5 105	14	11	48	ID
25 126	190 895	5 520	5 855	55 891	7 999	428 609	322 896	4	3	17	IL
19 594	132 328	3 422	4 316	40 234	3 165	137 922	103 109	4	4	15	IN
*4 386	26 892	511	1 697	13 907	1 108	47 478	36 196	8	8	24	IA
3 084	38 239	1 350	651	10 926	1 259	52 826	38 052	8	7	21	KS
14 104	37 244	1 482	1 757	13 378	1 732	79 006	57 997	7	6	32	KY
12 791	66 262	5 058	4 452	20 628	3 050	128 311	90 509	4	4	8	LA
898	10 839	768	615	3 797	1 218	39 157	31 023	11	10	19	ME
16 325	111 191	3 035	2 282	21 471	4 983	249 416	165 316	6	4	31	MD
9 417	88 482	2 729	2 502	18 737	5 210	264 982	198 646	4	5	18	MA
18 751	129 824	5 178	3 833	44 825	5 662	304 613	202 149	5	5	13	MI
10 718	90 263	3 205	5 040	28 972	2 692	143 589	102 721	6	5	22	MN
1 498	20 973	1 242	405	5 642	815	30 614	21 099	9	12	22	MS
4 551	120 762	3 221	4 058	21 437	4 683	203 370	154 850	4	3	27	MO
1 136	9 706	245	780	4 405	151	6 462	5 010	12	14	18	MT
2 532	19 587	953	*2 050	7 613	861	35 478	25 152	9	8	70	NE
1 771	29 408	434	(D)	4 878	703	34 102	22 963	9	11	(D)	NV
2 987	12 816	289	285	2 447	1 155	42 409	33 941	13	12	30	NH
17 944	110 560	5 578	3 815	33 906	5 141	275 169	198 969	4	3	15	NJ
658	16 453	331	441	2 755	814	31 799	21 068	8	8	21	NM
39 544	281 170	9 604	8 163	57 228	12 182	675 524	487 626	3	3	9	NY
17 896	100 978	(D)	4 652	27 358	5 049	168 080	116 462	5	4	21	NC
745	11 816	512	663	3 892	410	15 108	10 720	15	19	18	ND
23 886	168 156	6 899	6 298	47 730	6 564	303 382	224 404	4	4	15	OH
5 017	26 330	731	1 295	9 010	998	43 812	32 356	7	7	10	OK
2 663	62 143	2 273	2 364	15 454	1 620	71 186	53 067	7	6	24	OR
16 186	169 132	8 096	4 768	60 230	8 015	400 263	300 946	4	3	20	PA
2 459	10 406	303	*437	3 198	877	38 086	29 191	9	7	44	RI
9 014	46 918	1 806	1 686	11 604	2 790	96 043	61 875	8	7	24	SC
*737	9 552	331	531	2 048	243	9 473	6 964	14	13	36	SD
7 495	81 106	2 049	3 563	18 221	2 598	102 111	68 061	5	5	23	TN
83 202	341 350	12 228	6 941	67 006	12 022	494 542	340 316	3	4	10	TX
1 305	33 950	462	1 369	6 044	750	31 233	21 617	13	12	38	UT
506	9 239	231	*207	1 588	622	18 538	13 543	13	12	55	VT
21 970	135 829	3 834	3 409	23 622	6 218	248 746	174 181	4	4	23	VA
7 641	126 608	5 437	6 204	41 052	3 023	156 752	115 693	6	4	34	WA
298	(D)	410	219	2 965	289	14 615	11 548	23	19	39	WV
6 304	79 349	2 323	4 013	24 684	2 904	125 782	94 758	5	5	23	WI
(D)	6 448	85	254	2 358	119	5 452	4 831	14	(D)	36	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	31 920	29 867	24 779	27 369	1	1	1	1
Proprietors and working partners	17 637	11 525	12 750	21 248	1	2	2	2
All employees**	162 587	169 968	136 130	133 106	1	1	1	1
Construction workers:								
March	115 216	126 443	102 476	101 365	1	1	1	1
May	141 506	148 094	122 997	127 571	1	1	1	1
August	158 841	164 936	133 837	136 342	1	1	1	1
November	130 145	142 139	114 607	119 388	1	1	1	1
Average	136 427	145 385	121 353	121 288	1	1	1	1
Other employees:								
March	26 766	24 829	14 670	11 160	1	1	2	2
May	25 555	24 399	(NA)	(NA)	1	1	(NA)	(NA)
August	26 952	24 607	(NA)	(NA)	1	1	(NA)	(NA)
November	25 367	24 441	(NA)	(NA)	1	1	(NA)	(NA)
Average	26 160	24 583	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	3 164 065	2 978 578	1 875 744	1 361 463	1	1	1	1
Payroll, construction workers	2 470 237	2 386 175	1 589 420	1 191 130	1	1	1	1
Payroll, other employees	693 828	592 402	286 324	170 333	1	1	1	1
First-quarter payroll, all employees	636 112	625 980	386 532	267 898	1	1	1	1
Fringe benefits, all employees	704 963	627 051	324 644	249 079	1	1	1	1
Legally required expenditures	546 248	478 480	264 049	161 131	1	1	1	1
Voluntary expenditures	158 715	148 570	60 595	87 949	2	1	1	1
Dollar value of business done	8 739 774	8 027 973	4 688 082	3 205 318	1	1	1	1
Value of construction work	8 689 828	7 953 323	4 652 154	3 171 129	1	1	1	1
Value of construction work subcontracted in from others	4 487 597	3 405 709	1 806 303	1 442 314	2	2	1	1
Other business receipts	49 947	74 650	35 927	34 189	6	5	5	4
Net value of construction work†	8 094 749	7 445 552	4 398 612	3 051 294	1	1	1	1
Value added††	5 854 779	5 716 473	3 359 932	2 362 004	1	1	1	1
Selected costs	2 884 995	2 311 499	1 328 150	843 314	1	1	1	1
Materials, components, and supplies	2 108 529	1 641 607	958 511	652 394	1	1	1	1
Construction work subcontracted out to others	595 079	507 770	253 542	119 835	4	3	2	2
Selected power, fuels, and lubricants	181 387	162 121	116 096	71 086	1	1	1	1
Electricity	27 675	19 761	13 837	5 840	3	2	3	3
Natural and manufactured gas	6 936	4 543	4 365	4 371	4	4	4	4
Gasoline and diesel fuel	139 912	129 315	91 239	54 882	1	1	2	1
On highway use	124 392	114 005	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	15 520	15 309	(NA)	(NA)	4	3	(NA)	(NA)
Other, including lubricating oils and greases	6 865	8 501	6 654	5 994	5	3	4	5
Rental cost for machinery, equipment, and buildings	158 190	123 717	63 242	34 766	2	2	2	1
For machinery and equipment	97 582	75 966	42 210	24 914	2	2	2	1
For buildings	60 608	47 751	21 032	9 852	3	3	3	2
Selected purchased services	164 397	121 371	78 661	67 955	2	2	1	4
Communication services	71 296	54 894	32 365	28 045	2	2	2	6
Repairs to buildings and other structures	8 665	8 289	5 166	3 400	4	5	3	6
Repairs to machinery and equipment	84 436	58 188	41 130	36 511	2	2	2	5
Ownership of construction projects:								
Value of construction work	8 689 828	7 953 323	4 652 154	3 171 129	1	1	1	1
Government owned	1 529 898	1 171 608	588 562	376 108	3	3	5	1
Federal	388 392	393 823	(NA)	(NA)	5	4	(NA)	(NA)
State and local	1 141 506	777 785	(NA)	(NA)	4	3	(NA)	(NA)
Privately owned	7 159 929	6 781 714	4 063 592	2 795 021	1	1	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	986 237	759 537	2	2
Capital expenditures, other than land -----	144 930	147 339	3	4
New -----	107 194	114 268	4	4
Used -----	37 736	33 070	5	6
Retirements and disposition of depreciable assets -----	47 152	33 253	7	7
End-of-year gross book value of depreciable assets -----	1 084 015	873 623	2	2
Depreciation charges during year -----	128 538	119 375	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	163 167	181 271	5	4
Capital expenditures, other than land -----	13 990	19 153	13	8
New buildings and other structures -----	9 159	12 406	18	11
Used buildings and other structures -----	4 831	6 747	14	10
Retirements and disposition of depreciable assets -----	4 167	6 079	9	21
End-of-year gross book value of depreciable assets -----	172 989	194 346	5	4
Depreciation charges during year -----	13 973	19 278	5	6
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	823 070	578 266	2	2
Capital expenditures, other than land -----	130 941	128 185	3	4
New machinery and equipment, including automobiles and trucks -----	98 036	101 862	4	4
New automobiles and trucks, intended primarily for highway use -----	45 852	69 509	6	4
Used machinery and equipment, including automobiles and trucks -----	32 905	26 323	5	7
Retirements and disposition of depreciable assets -----	42 985	27 174	8	7
End-of-year gross book value of depreciable assets -----	911 026	679 277	2	2
Depreciation charges during year -----	114 565	100 097	2	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	31 920	1
Value of construction work	8 689 828	1
Establishments with inventories:		
Number	6 216	2
Value of construction work	2 980 579	1
Inventories ¹ :		
End of 1992, materials and supplies	69 265	5
End of 1991, materials and supplies	66 038	4
Establishments with no inventories:		
Number	12 854	1
Value of construction work	3 422 755	1
Establishments not reporting:		
Number	12 850	1
Value of construction work	2 286 494	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	31 920	23 021	5 306	2 269	1 072	172	66	11	3	—	
All employees** -----	162 587	40 905	33 919	29 445	31 170	11 597	9 583	3 839	2 128	—	
Payroll, all employees -----	3 164 065	580 112	584 483	600 193	753 602	314 139	228 883	81 631	21 021	—	
Dollar value of business done -----	8 739 774	2 160 777	1 626 572	1 580 079	1 850 735	722 280	564 909	185 530	48 892	—	
Value of construction work -----	8 689 828	2 154 415	1 620 002	1 568 908	1 835 404	717 770	560 021	184 417	48 892	—	
Net value of construction work† -----	8 094 749	1 975 197	1 497 475	1 452 715	1 735 848	682 489	525 763	<u>225 261</u>	(D)	—	
Value added†† -----	5 854 779	1 399 720	1 070 720	1 047 255	1 275 073	501 315	378 163	149 875	32 658	—	
Cost of materials, components, supplies, and fuels -----	2 289 916	581 841	433 324	416 631	476 107	185 685	152 488	<u>43 841</u>	(D)	—	
Cost of construction work subcontracted out to others -----	595 079	179 217	122 527	116 193	99 555	35 280	34 258	<u>8 048</u>	(D)	—	
Rental cost for machinery, equipment, and buildings -----	158 190	27 818	28 678	24 188	37 418	15 502	18 157	<u>6 429</u>	(D)	—	
Capital expenditures, other than land -----	144 930	40 579	28 020	22 336	30 686	9 640	11 515	<u>2 154</u>	(D)	—	
End-of-year gross book value of depreciable assets -----	1 084 015	271 108	190 278	183 544	242 165	97 115	78 920	<u>20 885</u>	(D)	—	
1987											
All employees** -----	169 968	(S)	36 981	32 590	34 174	13 374	9 522	4 130	—	—	
Value of construction work -----	7 953 323	(S)	1 527 383	1 381 694	1 731 396	749 964	504 939	249 321	—	—	
Value added†† -----	5 716 473	(S)	1 093 401	1 001 397	1 281 510	565 820	369 114	164 222	—	—	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	2	3	3	2	1	3	(Z)	(Z)	—	
Net value of construction work† -----	1	2	3	3	2	1	(Z)	(Z)	(D)	—	
Capital expenditures, other than land -----	3	7	9	8	8	1	(Z)	(Z)	(D)	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	31 920	(S)	(S)	7 454	9 568	3 471	1 971	1 105	296	106	40
All employees** -----	162 587	(S)	(S)	13 727	34 247	25 073	24 207	26 354	13 021	9 618	8 695
Payroll, all employees -----	3 164 065	(S)	(S)	161 669	497 018	444 741	498 578	632 477	374 982	272 999	219 800
Dollar value of business done -----	8 739 774	(S)	(S)	544 997	1 492 092	1 198 407	1 348 422	1 631 949	1 010 824	711 102	587 578
Value of construction work -----	8 689 828	(S)	(S)	543 597	1 487 620	1 193 659	1 337 046	1 620 998	1 003 829	707 784	581 487
Net value of construction work† -----	8 094 749	(S)	(S)	520 730	1 396 947	1 117 027	1 223 567	1 516 733	928 691	646 138	538 944
Value added†† -----	5 854 779	(S)	(S)	376 916	999 484	806 087	873 620	1 099 729	687 563	473 013	393 877
Cost of materials, components, supplies, and fuels -----	2 289 916	(S)	(S)	145 213	401 936	315 688	361 323	427 955	248 123	176 443	151 158
Cost of construction work subcontracted out to others -----	595 079	(S)	(S)	22 867	90 672	76 632	113 479	104 265	75 138	61 646	42 543
Rental cost for machinery, equipment, and buildings -----	158 190	(S)	(S)	6 120	21 092	19 475	23 188	31 939	20 096	14 748	19 518
Capital expenditures, other than land -----	144 930	(S)	(S)	13 964	28 321	16 212	19 384	25 944	15 678	11 074	9 656
End-of-year gross book value of depreciable assets -----	1 084 015	(S)	(S)	83 526	165 071	142 299	149 908	213 450	134 675	90 904	74 501
1987											
All employees** -----	169 968	(S)	(S)	(S)	36 996	28 054	26 085	25 572	13 725	8 666	6 266
Value of construction work -----	7 953 323	(S)	(S)	(S)	1 382 442	1 175 312	1 278 071	1 447 895	900 099	593 676	468 278
Value added†† -----	5 716 473	(S)	(S)	(S)	976 844	830 751	924 425	1 046 975	656 541	438 641	327 970
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	3	3	4	3	2	2	(Z)	(Z)
Net value of construction work† -----	1	(S)	(S)	3	2	3	3	2	2	1	(Z)
Capital expenditures, other than land -----	3	(S)	(S)	10	9	12	13	6	6	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

11—8 PAINTING AND PAPER HANGING

CONSTRUCTION—INDUSTRY SERIES

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	8 689 828	2 974 580	1 650 183	3 869 515	1	1	2	1
Building construction	7 102 870	2 669 616	1 468 106	2 965 148	1	2	2	1
Single-family houses	2 585 553	1 174 927	377 872	1 032 753	2	3	5	2
Single-family houses, detached	2 222 793	1 029 193	324 251	869 349	2	3	5	2
Single-family houses, attached, including townhouses and townhouse-type condominiums	362 760	145 734	53 621	163 405	4	5	8	5
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	531 817	114 103	79 197	338 517	4	7	7	4
Other residential buildings, including hotels, motels, and tourist cabins	210 184	66 699	65 331	78 154	5	8	11	6
Hotels, motels, and tourist cabins	150 335	55 883	53 054	41 397	6	8	13	4
Other residential buildings	59 849	10 816	12 277	36 756	10	20	19	11
Office buildings	1 046 095	349 732	340 690	355 673	2	2	3	3
Other commercial buildings such as stores, restaurants, and automobile service stations	863 277	340 166	163 678	359 433	3	3	4	4
Industrial buildings and warehouses	1 023 818	303 943	192 273	527 602	2	6	4	2
Industrial buildings	879 591	246 299	162 038	471 254	3	8	4	2
Warehouses	144 227	57 643	30 235	56 348	4	4	5	6
Religious buildings	111 339	34 828	27 403	49 109	7	11	5	8
Educational buildings	283 974	124 925	77 560	81 488	4	5	5	6
Hospitals and institutional buildings	335 711	127 829	121 580	86 301	4	6	6	5
Other nonresidential buildings	111 102	32 464	22 520	56 118	6	8	10	11
Nonbuilding construction	1 391 408	304 964	182 077	904 367	2	4	6	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	284 974	104 568	79 489	100 917	5	7	9	6
Bridges, tunnels, and elevated highways	233 760	22 895	29 563	181 303	5	7	23	7
Blast furnaces, petroleum refineries, chemical complexes, etc.	343 681	58 414	21 716	263 551	3	9	5	3
Power plants	105 801	10 675	13 252	81 874	4	13	17	3
Sewage treatment and water treatment plants	114 268	50 013	21 437	42 818	4	5	4	8
Sewage treatment plants	59 030	28 517	14 085	16 428	6	7	5	11
Water treatment plants	55 239	21 497	7 351	26 391	6	6	5	10
Water storage facilities	71 765	11 147	1 356	59 262	26	7	9	32
Ships	81 226	2 870	*986	77 371	4	3	57	4
Other nonbuilding construction	155 932	44 383	14 280	97 269	5	11	10	5
Construction work, n.s.k.	195 550	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)
1987								
Value of construction work	7 953 323	3 001 279	1 339 642	2 926 718	1	1	2	1
Building construction	6 291 053	2 768 344	1 231 058	2 291 652	1	1	2	2
Single-family houses	1 929 573	932 192	264 553	732 827	2	2	3	3
Single-family houses, detached	1 594 775	740 161	228 026	626 586	2	3	4	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	334 798	192 031	36 527	106 241	4	5	8	6
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	567 725	224 681	75 973	267 070	4	7	7	5
Other residential buildings, including hotels, motels, and tourist cabins	360 642	157 085	91 273	112 283	4	4	10	5
Hotels, motels, and tourist cabins	224 176	113 255	59 696	51 224	4	3	14	4
Other residential buildings	136 466	43 830	31 577	61 059	7	10	10	9
Office buildings	1 105 840	489 963	296 245	319 631	2	2	3	3
Other commercial buildings such as stores, restaurants, and automobile service stations	646 199	298 006	144 539	203 653	2	3	3	3
Industrial buildings and warehouses	988 816	417 459	161 893	409 463	2	3	3	3
Industrial buildings	839 501	332 701	140 439	366 360	2	3	4	3
Warehouses	149 315	84 758	21 454	43 103	5	7	5	7
Religious buildings	99 174	28 869	23 577	46 727	3	6	5	5
Educational buildings	213 712	72 659	64 139	76 913	4	6	6	6
Hospitals and institutional buildings	263 224	108 944	88 005	66 274	3	3	4	8
Other nonresidential buildings	116 148	38 486	20 861	56 811	10	17	12	13
Nonbuilding construction	976 587	232 936	108 584	635 066	3	4	5	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	158 832	54 397	30 149	74 285	7	10	14	9
Bridges, tunnels, and elevated highways	153 356	18 204	11 367	123 784	10	13	22	12
Blast furnaces, petroleum refineries, chemical complexes, etc.	201 543	24 858	20 039	156 645	3	3	8	4
Power plants	90 827	35 575	8 553	46 698	2	3	5	2
Sewage treatment and water treatment plants	93 871	59 147	12 688	22 036	6	7	8	14
Ships	82 877	6 584	5 901	70 391	6	17	6	6
Other nonbuilding construction	195 281	34 171	19 887	141 226	9	13	17	10
Construction work, n.s.k.	685 683	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments -----	31 920	162 587	3 164 065	8 689 828	5 394 461	8 094 749	5 854 779	595 079	1	1	4
Establishments not specializing by type -----	5 475	44 804	971 440	2 444 822	(NA)	2 296 147	1 680 292	148 675	2	2	6
Establishments specializing 51 percent or more -----	26 445	117 783	2 192 624	6 245 006	5 394 461	5 798 602	4 174 487	446 404	1	1	4
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	16 483	48 569	721 913	2 135 557	1 901 659	1 983 869	1 420 102	151 688	2	2	6
Establishments with —											
100 percent specialization -----	8 189	21 911	315 477	986 678	986 678	908 861	642 204	77 817	3	3	10
90 to 99 percent specialization -----	2 877	8 836	135 778	399 713	373 087	372 726	265 441	26 987	5	5	16
80 to 89 percent specialization -----	2 018	6 775	99 557	266 382	219 338	252 983	187 811	13 399	6	5	11
70 to 79 percent specialization -----	1 741	5 548	83 108	240 109	175 674	226 298	163 227	13 812	6	6	10
60 to 69 percent specialization -----	1 300	4 230	69 132	191 513	118 620	175 412	128 291	16 102	8	7	21
51 to 59 percent specialization -----	357	1 270	18 861	51 161	28 263	47 590	33 127	3 572	14	13	32
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	1 239	4 925	76 085	202 499	168 855	193 358	140 781	9 140	8	7	16
Establishments with —											
100 percent specialization -----	512	1 544	22 226	61 699	61 699	58 469	43 178	3 230	14	12	33
90 to 99 percent specialization -----	207	966	14 177	32 992	30 532	32 104	23 362	888	25	21	30
80 to 89 percent specialization -----	(S)	756	12 887	34 200	27 889	33 412	22 483	788	13	13	31
70 to 79 percent specialization -----	(S)	760	10 559	32 124	23 468	(D)	21 627	(D)	17	17	(D)
60 to 69 percent specialization -----	155	813	14 941	38 186	23 442	36 372	27 830	1 815	15	14	13
51 to 59 percent specialization -----	*17	*86	*1 296	*3 298	*1 825	(D)	*2 301	(D)	56	42	(D)
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type -----	1 620	7 415	123 839	347 008	300 308	311 729	229 682	35 279	6	6	14
Establishments with —											
100 percent specialization -----	761	2 950	51 010	137 953	137 953	123 343	95 828	14 610	10	10	24
90 to 99 percent specialization -----	260	1 281	20 062	55 310	51 856	46 934	33 970	8 376	15	12	28
80 to 89 percent specialization -----	(S)	961	12 076	44 118	36 063	38 475	26 476	5 643	16	19	38
70 to 79 percent specialization -----	195	1 323	25 715	66 783	48 534	64 722	45 192	2 060	13	10	16
60 to 69 percent specialization -----	146	861	13 803	36 155	22 154	34 177	25 725	1 978	21	19	25
51 to 59 percent specialization -----	*8	*40	*1 174	*6 689	*3 750	*4 078	*2 492	*2 611	49	60	65
HOTELS, MOTELS, AND TOURIST CABINS											
All establishments specializing in type -----	82	569	14 727	44 081	37 467	35 947	29 795	8 134	19	15	24
Establishments with —											
100 percent specialization -----	(S)	194	4 093	21 204	21 204	15 369	14 213	5 835	39	23	31
90 to 99 percent specialization -----	(S)	*57	(D)	*3 205	*2 884	*2 684	*1 757	(S)	64	67	(S)
80 to 89 percent specialization -----	(S)	*9	(S)	(D)	(D)	(D)	(D)	(D)	74	(D)	(D)
70 to 79 percent specialization -----	*20	207	5 794	12 264	8 861	11 229	8 669	*1 035	31	31	46
60 to 69 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
51 to 59 percent specialization -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
OTHER RESIDENTIAL BUILDINGS											
All establishments specializing in type -----	190	785	13 279	49 193	41 431	45 525	32 098	3 668	16	14	28
Establishments with —											
100 percent specialization -----	116	389	5 907	27 014	27 014	25 034	17 406	1 980	20	16	36
90 to 99 percent specialization -----	*16	*26	*488	*1 392	*1 292	*1 248	*1 064	(S)	64	67	(S)
80 to 89 percent specialization -----	*13	*11	(S)	(S)	(S)	(D)	(S)	(D)	71	(S)	(D)
70 to 79 percent specialization -----	*35	190	3 093	8 513	6 252	7 954	5 550	*558	38	37	45
60 to 69 percent specialization -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
51 to 59 percent specialization -----	*4	*102	2 609	7 285	3 735	(D)	5 677	(D)	45	22	(D)
OFFICE BUILDINGS											
All establishments specializing in type -----	1 225	11 617	292 433	695 176	531 983	655 065	470 913	40 110	3	3	9
Establishments with —											
100 percent specialization -----	342	2 264	53 933	133 791	133 791	125 595	90 564	8 196	8	8	32
90 to 99 percent specialization -----	121	990	26 460	59 745	55 247	58 058	43 404	1 687	11	8	17
80 to 89 percent specialization -----	188	1 679	48 881	108 777	88 215	104 072	77 996	4 705	8	7	23
70 to 79 percent specialization -----	201	2 643	64 640	151 506	110 393	143 442	103 386	8 064	7	6	8
60 to 69 percent specialization -----	281	3 081	74 174	184 315	113 206	169 304	116 805	15 011	5	5	12
51 to 59 percent specialization -----	91	960	24 346	57 042	31 130	54 594	38 759	2 447	14	11	32
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	1 483	9 847	197 906	532 276	450 594	500 180	365 728	32 096	4	4	10
Establishments with —											
100 percent specialization -----	601	3 737	78 957	213 105	213 105	201 522	149 957	11 583	8	6	17
90 to 99 percent specialization -----	150	1 015	19 777	62 800	57 538	57 196	41 866	5 604	14	20	36
80 to 89 percent specialization -----	206	1 862	36 994	89 049	73 073	85 944	63 732	3 105	9	9	15
70 to 79 percent specialization -----	215	1 185	23 257	63 721	46 259	60 874	46 359	2 847	13	11	18
60 to 69 percent specialization -----	235	1 438	24 313	61 850	38 092	58 339	39 531	3 511	13	13	25
51 to 59 percent specialization -----	(S)	611	14 608	41 751	22 528	36 305	24 282	(S)	12	10	(S)

11-10 PAINTING AND PAPER HANGING

CONSTRUCTION—INDUSTRY SERIES

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992—Con.

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	681	9 184	215 329	624 121	517 489	565 033	417 185	59 088	4	4	20
Establishments with —											
100 percent specialization -----	231	2 806	66 069	218 575	218 575	191 357	136 502	*27 218	7	10	44
90 to 99 percent specialization -----	68	1 340	30 992	83 472	77 619	79 208	59 467	4 264	9	6	1
80 to 89 percent specialization -----	88	1 501	36 316	97 963	79 815	88 166	68 086	9 796	10	7	13
70 to 79 percent specialization -----	81	1 287	27 135	64 003	46 379	63 151	44 364	852	6	7	14
60 to 69 percent specialization -----	173	1 466	32 482	91 334	56 179	86 177	64 075	5 157	11	9	15
51 to 59 percent specialization -----	40	783	22 336	68 775	38 921	56 974	44 691	11 802	9	8	2
EDUCATIONAL BUILDINGS											
All establishments specializing in type -----	282	1 562	30 778	82 004	62 051	75 891	54 444	6 113	13	12	28
Establishments with —											
100 percent specialization -----	100	(S)	4 519	(S)	(S)	10 327	5 519	(S)	(S)	(S)	(S)
90 to 99 percent specialization -----	*7	*19	*669	*1 263	*1 238	*1 181	*887	*82	65	59	59
80 to 89 percent specialization -----	61	621	8 950	26 943	21 734	25 500	18 937	*1 443	28	28	56
70 to 79 percent specialization -----	*24	147	3 851	9 141	6 577	8 853	6 496	(S)	30	28	(S)
60 to 69 percent specialization -----	84	451	9 839	24 084	14 914	23 716	17 742	368	18	17	37
51 to 59 percent specialization -----	8	120	2 950	6 774	3 789	6 313	4 863	461	30	26	34
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type -----	295	1 881	37 801	98 939	69 184	93 546	63 592	*5 394	14	16	48
Establishments with —											
100 percent specialization -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
90 to 99 percent specialization -----	49	215	3 816	10 152	9 254	9 895	6 429	*257	31	35	50
80 to 89 percent specialization -----	*23	*141	*1 792	*11 113	*8 954	*8 326	*4 365	(S)	52	73	(S)
70 to 79 percent specialization -----	63	351	7 128	16 813	11 982	16 261	10 921	*552	25	24	44
60 to 69 percent specialization -----	87	811	19 211	46 214	28 059	44 588	29 871	1 626	27	26	22
51 to 59 percent specialization -----	*25	187	3 684	8 230	4 518	8 084	6 092	*145	37	31	46
HIGHWAYS, STREETS, AND RELATED WORK SUCH AS INSTALLATION OF GUARD RAILS, HIGHWAY SIGNS, LIGHTING, ETC.											
All establishments specializing in type -----	202	2 893	79 234	289 596	275 707	280 299	172 824	9 297	6	5	4
Establishments with —											
100 percent specialization -----	174	2 163	56 826	214 540	214 540	209 971	125 738	4 570	7	6	6
90 to 99 percent specialization -----	10	387	11 902	38 682	35 905	34 846	23 920	3 837	11	6	4
80 to 89 percent specialization -----	5	98	4 923	19 262	15 434	(D)	12 515	(D)	20	10	(D)
70 to 79 percent specialization -----	—	—	—	—	—	—	—	—	—	—	—
60 to 69 percent specialization -----	*5	73	2 356	*6 545	*4 278	*6 545	*3 889	—	37	40	—
51 to 59 percent specialization -----	*9	171	3 227	10 566	5 549	(D)	6 762	(D)	8	10	(D)
BLAST FURNACES, PETROLEUM REFINERIES, CHEMICAL COMPLEXES, ETC.											
All establishments specializing in type -----	195	4 917	117 148	298 504	273 283	284 235	215 330	14 269	4	5	27
Establishments with —											
100 percent specialization -----	113	2 737	59 842	146 305	146 305	141 025	110 283	5 280	5	6	(Z)
90 to 99 percent specialization -----	28	1 325	34 360	83 520	78 722	79 748	61 423	3 772	6	6	18
80 to 89 percent specialization -----	6	323	10 595	23 822	19 432	(D)	13 985	(D)	14	10	(D)
70 to 79 percent specialization -----	9	147	4 613	11 468	8 393	(D)	8 620	(D)	19	18	(D)
60 to 69 percent specialization -----	(S)	293	5 550	28 434	17 765	(D)	17 236	(D)	23	33	(D)
51 to 59 percent specialization -----	*6	*91	2 188	*4 955	*2 667	*4 955	*3 783	—	41	45	—
SHIPS											
All establishments specializing in type -----	40	1 729	28 883	82 581	68 841	75 756	56 010	6 825	7	4	3
Establishments with —											
100 percent specialization -----	37	(D)	(D)	39 400	39 400	(D)	32 022	(D)	(D)	8	(D)
90 to 99 percent specialization -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
80 to 89 percent specialization -----	1	(D)	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	—
70 to 79 percent specialization -----	—	—	—	—	—	—	—	—	—	—	—
60 to 69 percent specialization -----	—	—	—	—	—	—	—	—	—	—	—
51 to 59 percent specialization -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	31 920	136 427	115 216	141 506	158 841	130 145	1	1	1	1	1	1
Alabama	374	2 127	1 900	1 995	2 419	2 192	6	6	7	7	7	7
Alaska	105	372	218	433	584	255	11	11	17	13	13	14
Arizona	511	2 734	2 156	2 769	3 108	2 904	5	7	7	7	8	8
Arkansas	187	901	859	871	1 012	863	9	12	15	12	12	11
California	4 099	16 304	14 947	16 630	18 371	15 266	1	2	2	2	2	2
Colorado	647	2 657	2 119	2 856	3 174	2 479	4	5	5	5	6	5
Connecticut	542	1 629	1 153	1 642	2 174	1 545	4	4	7	5	4	5
Delaware	128	448	372	461	534	424	10	14	10	14	16	12
District of Columbia	16	208	156	257	238	181	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Florida	1 977	7 612	7 810	7 518	7 877	7 242	3	4	4	4	5	5
Georgia	628	3 516	3 223	3 641	3 889	3 310	5	5	5	5	6	5
Hawaii	162	1 273	1 229	1 246	1 407	1 210	4	5	6	6	6	5
Idaho	191	466	306	444	591	524	8	12	12	9	16	15
Illinois	1 351	5 665	4 756	5 962	6 645	5 297	2	4	3	5	5	3
Indiana	757	3 518	2 937	3 712	4 069	3 354	4	4	5	5	5	5
Iowa	362	1 324	1 171	1 353	1 561	1 214	5	8	10	8	7	9
Kansas	312	1 171	1 117	1 194	1 286	1 089	6	8	9	9	8	9
Kentucky	361	1 796	1 486	1 840	2 123	1 737	6	8	9	7	8	8
Louisiana	291	3 099	2 704	3 255	3 388	3 050	5	4	6	5	5	5
Maine	171	482	329	462	614	524	8	11	12	11	12	15
Maryland	762	4 244	3 162	4 948	5 060	3 807	4	6	4	10	9	4
Massachusetts	712	2 539	1 721	2 717	3 319	2 398	4	4	5	4	5	5
Michigan	926	3 668	2 975	3 742	4 428	3 526	3	6	6	5	6	7
Minnesota	466	1 881	1 451	1 913	2 414	1 748	5	6	6	6	6	8
Mississippi	211	811	786	818	858	784	8	10	11	10	10	10
Missouri	774	2 994	2 584	3 091	3 412	2 888	3	4	5	4	4	5
Montana	114	359	241	370	468	357	8	12	14	14	14	14
Nebraska	194	773	682	803	831	776	8	9	12	8	9	10
Nevada	140	641	573	643	825	525	11	9	10	9	14	9
New Hampshire	183	435	208	510	601	422	6	13	15	14	15	13
New Jersey	1 049	3 523	2 586	3 633	4 300	3 572	3	4	4	4	4	4
New Mexico	158	511	427	516	546	558	7	8	10	9	10	10
New York	2 092	9 382	6 843	10 456	11 913	8 316	2	3	3	3	3	3
North Carolina	1 132	4 084	3 720	4 192	4 441	3 984	4	5	5	5	5	5
North Dakota	72	319	221	309	426	321	13	14	17	17	13	15
Ohio	1 369	5 405	3 964	5 585	6 859	5 212	3	4	5	4	4	4
Oklahoma	306	1 082	948	1 100	1 181	1 100	6	7	9	8	6	8
Oregon	480	1 684	1 536	1 674	1 970	1 555	4	7	7	8	8	7
Pennsylvania	1 372	6 192	4 938	6 222	7 417	6 192	3	4	4	4	4	4
Rhode Island	186	449	267	466	575	486	2	10	12	9	11	13
South Carolina	475	1 824	1 768	1 863	1 929	1 737	3	8	9	8	8	8
South Dakota	106	336	285	370	430	260	13	11	13	14	14	10
Tennessee	405	2 166	2 023	2 174	2 370	2 098	3	4	5	5	5	6
Texas	1 613	10 846	9 406	11 348	11 961	10 668	2	3	3	3	4	3
Utah	234	918	791	989	1 002	889	7	11	13	14	12	11
Vermont	139	362	214	383	533	317	7	13	17	15	12	13
Virginia	1 156	4 640	4 185	4 824	5 058	4 493	3	4	4	4	4	4
Washington	1 000	3 825	3 208	3 945	4 675	3 474	3	6	5	7	8	6
West Virginia	95	262	210	289	330	240	15	22	26	22	19	21
Wisconsin	748	2 713	2 181	2 820	3 325	2 527	4	5	6	6	6	5
Wyoming	79	254	166	274	318	256	6	14	12	14	17	17

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	8 689 828	31 692	7 911 831	4 051	777 997	7 953 323	9.3	1	1	2
Alabama -----	139 994	(S)	112 251	92	27 742	90 792	54.2	5	6	13
Alaska -----	39 419	105	30 462	6	8 956	23 979	64.4	6	8	(Z)
Arizona -----	147 346	509	144 635	25	2 712	105 537	39.6	7	7	14
Arkansas -----	57 097	187	48 783	33	8 314	42 752	33.6	12	13	30
California -----	1 165 925	4 083	1 145 784	85	20 142	1 136 578	2.6	2	2	5
Colorado -----	143 441	644	140 177	30	3 264	102 953	39.3	6	6	17
Connecticut -----	127 439	541	107 897	111	19 542	180 211	-29.3	5	6	11
Delaware -----	33 152	120	21 761	78	11 390	34 723	-4.5	10	12	18
District of Columbia -----	40 473	(S)	8 616	157	31 857	50 091	-19.2	9	(Z)	12
Florida -----	466 359	1 977	423 297	116	43 062	415 140	12.3	4	4	5
Georgia -----	188 870	620	168 763	107	20 106	198 111	-4.7	9	10	19
Hawaii -----	125 018	162	112 046	*23	12 972	91 242	37.0	3	3	10
Idaho -----	27 107	191	24 926	50	2 182	7 439	264.4	10	10	30
Illinois -----	417 812	1 348	378 336	145	39 476	417 688	—	3	3	4
Indiana -----	203 383	753	180 682	125	22 702	145 666	39.6	4	5	15
Iowa -----	83 791	361	67 823	76	15 969	44 835	86.9	9	9	27
Kansas -----	76 304	307	55 405	120	20 898	61 878	23.3	6	7	9
Kentucky -----	94 581	357	83 829	97	10 751	69 991	35.1	6	7	10
Louisiana -----	190 779	291	162 917	55	27 862	145 012	31.6	3	3	4
Maine -----	24 764	166	22 894	21	1 870	40 432	-38.8	10	10	22
Maryland -----	198 011	749	164 091	174	33 920	215 476	-8.1	4	5	9
Massachusetts -----	169 892	704	159 590	88	10 301	274 492	-38.1	5	5	12
Michigan -----	267 918	925	253 609	69	14 309	303 461	-11.7	5	5	10
Minnesota -----	142 168	466	135 429	61	6 739	134 020	6.1	6	6	18
Mississippi -----	46 155	211	32 880	58	13 275	32 210	43.3	9	12	6
Missouri -----	173 113	764	160 716	104	12 397	177 415	-2.4	4	4	14
Montana -----	24 783	114	21 082	21	3 701	6 890	259.7	12	13	10
Nebraska -----	46 117	194	43 959	30	2 157	36 286	27.1	8	8	21
Nevada -----	46 685	140	40 422	47	6 263	36 709	27.2	11	11	27
New Hampshire -----	27 053	183	24 943	48	2 110	43 191	-37.4	12	12	32
New Jersey -----	252 716	1 035	218 588	199	34 128	281 748	-10.3	3	4	5
New Mexico -----	27 405	158	23 971	*27	3 433	32 421	-15.5	7	7	26
New York -----	630 086	2 090	600 373	219	29 713	667 947	-5.7	3	3	10
North Carolina -----	236 474	1 123	210 448	109	26 026	170 999	38.3	4	4	11
North Dakota -----	15 996	72	13 568	11	2 428	14 583	9.7	17	20	9
Ohio -----	364 513	1 357	340 445	115	24 068	298 031	22.3	4	4	16
Oklahoma -----	61 088	306	53 288	37	7 801	40 372	51.3	8	9	11
Oregon -----	102 677	480	90 313	37	12 364	72 613	41.4	6	6	1
Pennsylvania -----	358 674	1 350	335 044	165	23 630	335 947	6.8	4	4	8
Rhode Island -----	32 735	182	24 657	41	8 078	41 566	-21.2	6	8	6
South Carolina -----	104 377	475	84 644	98	19 733	109 559	-4.7	7	8	13
South Dakota -----	17 962	98	15 666	32	2 296	8 072	122.5	12	13	26
Tennessee -----	129 722	397	114 313	99	15 409	104 976	23.6	4	5	6
Texas -----	648 795	1 604	618 037	109	30 759	458 341	41.6	4	4	17
Utah -----	50 741	233	47 327	27	3 413	32 542	55.9	10	10	34
Vermont -----	16 671	134	15 177	28	1 493	23 577	-29.3	12	13	17
Virginia -----	271 612	1 140	221 386	168	50 226	293 278	-7.4	3	4	3
Washington -----	228 332	1 000	219 815	77	8 518	155 415	46.9	4	4	12
West Virginia -----	20 657	95	12 940	78	7 718	22 755	-9.2	13	20	11
Wisconsin -----	169 363	732	162 910	80	6 454	114 686	47.7	5	5	5
Wyoming -----	14 283	79	10 917	41	3 367	8 669	64.8	11	14	20

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business -----	8 739 774	8 027 973	1	1
SPECIAL TRADE CONTRACTORS				
Bridge painting contractor -----	220 343	156 596	5	10
Drywall, sheetrock, spackling and finishing contractor -----	42 971	45 480	7	5
Painting contractor -----	6 961 779	6 362 909	1	1
Paper hanging contractor -----	694 145	723 624	2	2
Ship painting contractor -----	86 165	69 912	3	6
Traffic lane painting contractor -----	321 144	171 005	5	7
Other construction activities -----	295 565	221 710	4	(NA)
Other business activities -----	44 084	97 128	7	(NA)
Kind of business activity, n.s.k. -----	73 579	179 607	7	6

Table 12. **Selected Industry Ratios for Establishments With Payroll: 1992 and 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	5.1	5.7	1
Number of construction workers	4.3	4.9	(Z)
Number of all other employees .....	.8	.8	1
Payroll, all employees \$1,000 ..	99.1	99.7	(Z)
Payroll, construction workers do ..	77.4	79.9	1
Payroll, other employees do ..	21.7	19.8	1
Dollar value of business done do ..	273.8	268.8	1
Value of construction work do ..	272.2	266.3	1
Cost of materials, components, supplies, and fuels do ..	71.7	60.4	1
Construction work subcontracted to others do ..	18.6	17.0	4
Rental cost for machinery, equipment, and buildings do ..	5.0	4.1	2
Capital expenditures, other than land do ..	4.5	4.9	4
Gross book value of depreciable assets do ..	34.0	29.3	2
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	19.5	17.5	(Z)
Dollar value of business done do ..	53.8	47.2	1
Value added†† do ..	36.0	33.6	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	18.1	16.4	(Z)
Value of construction work do ..	63.7	54.7	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	26.5	24.1	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.364	.375	(Z)
Cost of materials, components, supplies, and fuels do ..	.264	.227	1
Cost of construction work subcontracted out to others do ..	.068	.064	3
Value of construction work subcontracted in from others do ..	.516	.428	2
Rental cost for machinery, equipment, and buildings do ..	.018	.016	2

Table 13. **Selected Industry Ratios for Establishments With Payroll by State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States	5.1	19.5	63.7	.364	.264	.068	.516	.018
Alabama	6.9	18.9	61.1	.375	.267	.083	.610	.026
Alaska	4.1	22.5	81.9	.323	.249	.074	.619	.008
Arizona	6.5	16.5	55.4	.359	.310	.051	.709	.013
Arkansas	5.7	16.4	57.4	.334	.258	.104	.445	.012
California	4.8	20.9	71.3	.352	.275	.047	.581	.021
Colorado	4.7	16.7	54.0	.355	.309	.072	.618	.010
Connecticut	3.6	21.9	69.9	.375	.212	.043	.395	.013
Delaware	4.2	17.9	51.2	.422	.192	.093	.503	.013
District of Columbia	15.2	(D)	74.3	(D)	(D)	(D)	(D)	(D)
Florida	4.8	16.5	61.2	.336	.294	.077	.534	.023
Georgia	6.6	19.1	67.7	.333	.240	.147	.563	.020
Hawaii	9.5	30.6	88.0	.420	.243	.074	.569	.018
Idaho	2.8	14.8	55.6	.304	.297	.026	.629	.013
Illinois	5.1	26.0	74.0	.424	.237	.060	.455	.013
Indiana	5.6	19.1	63.5	.364	.251	.088	.593	.015
Iowa	4.2	17.3	55.4	.355	.247	*.060	.366	.007
Kansas	4.3	17.8	54.1	.374	(D)	.049	.603	.021
Kentucky	5.9	15.4	57.1	.319	.285	.137	.363	.014
Louisiana	12.2	19.5	58.2	.385	.248	.071	.368	.028
Maine	3.4	14.7	52.9	.338	.252	.035	.425	.030
Maryland	6.4	18.5	52.3	.409	.267	.074	.501	.014
Massachusetts	4.3	20.2	64.4	.378	.229	.058	.541	.017
Michigan	4.9	20.3	71.8	.348	.274	.071	.493	.020
Minnesota	5.0	25.0	83.9	.368	.262	.068	.572	.020
Mississippi	4.4	14.7	45.1	.372	(D)	.041	.573	.034
Missouri	4.6	22.5	63.4	.418	.266	.024	.636	.017
Montana	3.9	16.1	62.6	.317	.297	.051	.432	.011
Nebraska	4.7	17.2	58.9	.343	.238	.056	.430	.021
Nevada	5.7	20.8	70.9	.365	.312	.039	.647	.010
New Hampshire	2.9	15.3	59.6	.309	(D)	.115	.494	.011
New Jersey	3.9	21.7	71.1	.358	.241	.072	.441	.022
New Mexico	3.7	14.3	48.0	.339	.289	.027	.671	.014
New York	5.3	21.8	68.7	.377	.240	.061	.436	.015
North Carolina	4.4	16.0	53.2	.367	.264	.082	.465	(D)
North Dakota	5.1	18.2	64.5	.325	.312	.036	.574	.025
Ohio	4.8	19.2	66.6	.349	.269	.066	.467	.019
Oklahoma	4.2	17.2	60.0	.338	.252	.077	.405	.011
Oregon	4.2	17.3	56.3	.370	.309	.028	.655	.024
Pennsylvania	5.4	20.3	64.8	.372	.285	.040	.421	.020
Rhode Island	2.9	17.1	58.0	.359	.209	.094	.400	.012
South Carolina	4.6	14.8	51.0	.345	.265	.097	.505	.019
South Dakota	3.9	14.8	57.0	.319	.293	*.039	.499	.017
Tennessee	6.4	18.0	57.5	.375	.278	.060	.651	.016
Texas	7.7	18.0	61.5	.336	.252	.125	.512	.018
Utah	4.7	15.0	56.8	.317	.308	.025	.651	.009
Vermont	3.0	15.0	44.8	.390	.258	.031	.569	.014
Virginia	4.8	17.6	55.4	.380	.246	.086	.529	.015
Washington	4.5	19.8	61.0	.381	.283	.033	.543	.023
West Virginia	3.1	18.6	53.1	.393	(D)	.021	(D)	.029
Wisconsin	4.4	20.1	64.1	.379	.278	.036	.456	.013
Wyoming	3.7	(D)	43.3	(D)	(D)	(D)	.587	.008

Appendix A.

Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

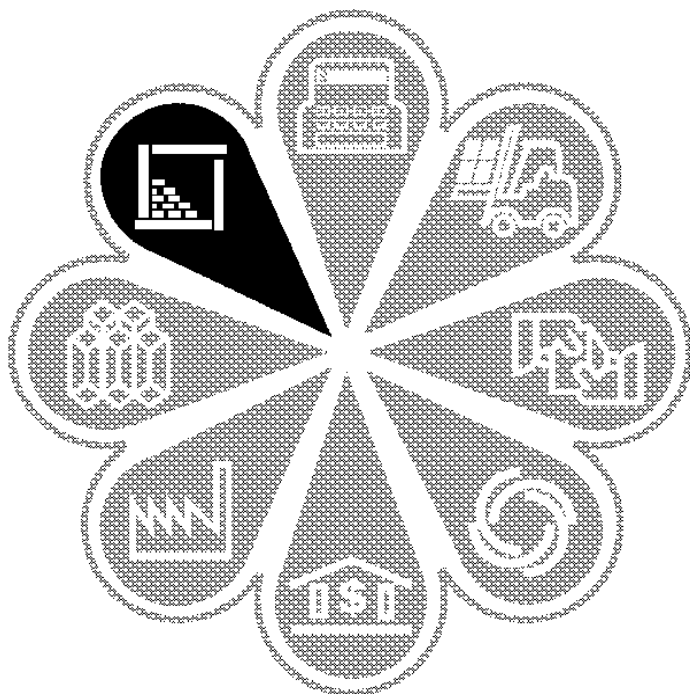
Census of Construction Industries

CC92-I-12

INDUSTRY SERIES

Electrical Work Special Trade Contractors

Industry 1731



1992 Census of Construction Industries

CC92-I-12

INDUSTRY SERIES

Electrical Work Special Trade Contractors

Industry 1731

Issued August 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Juliana Van Berkum**, **Susan L. Hostetter**, **Doris M. Kling**, **Carolyn J. Stone**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke**. Under the direction of **C. Lloyd Anderson**, the Systems Support Staff maintained the small computers and assisted in the management of computer output.

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Administration**

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Summary of Findings

Establishments classified in this industry are primarily engaged in electrical power and lighting installation at the construction site. This industry also includes establishments engaged in the installation of telecommunication equipment, electronic controls, security systems, and highway signals. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$40.7 billion in total dollar value of business. Of this amount, \$40.3 billion were for the value of construction work. These establishments paid out \$14.9 billion for materials, components, and supplies and \$1.7 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$568 million. Value added for 1992 was \$23.5 billion.

There were 54,022 establishments with total employment averaging 487,072 during the year. Total payroll for 1992 was \$13.6 billion.

Larger establishments with 20 employees or more, while representing only 9 percent of the total number of employer establishments in this industry, accounted for 62 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

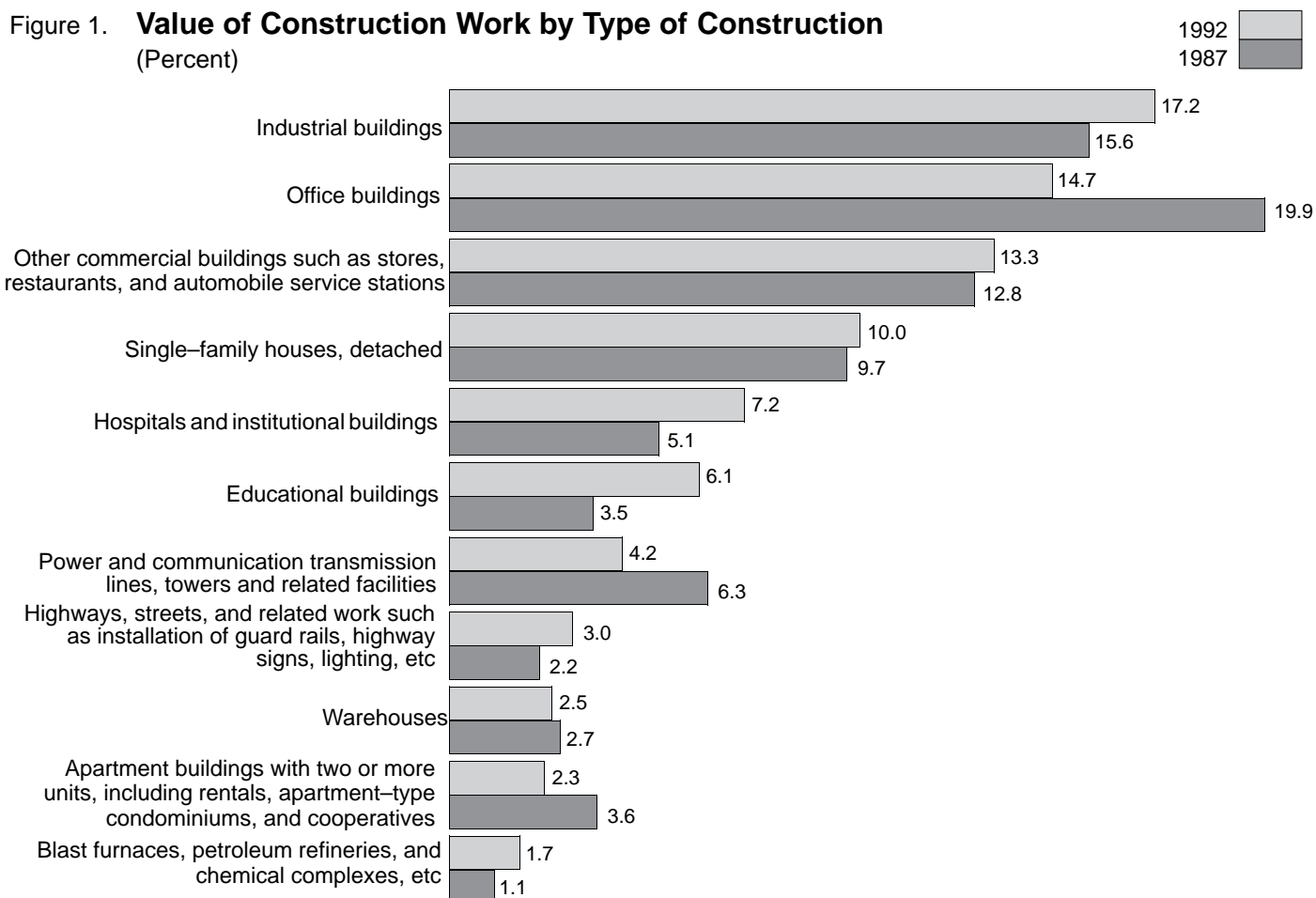


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

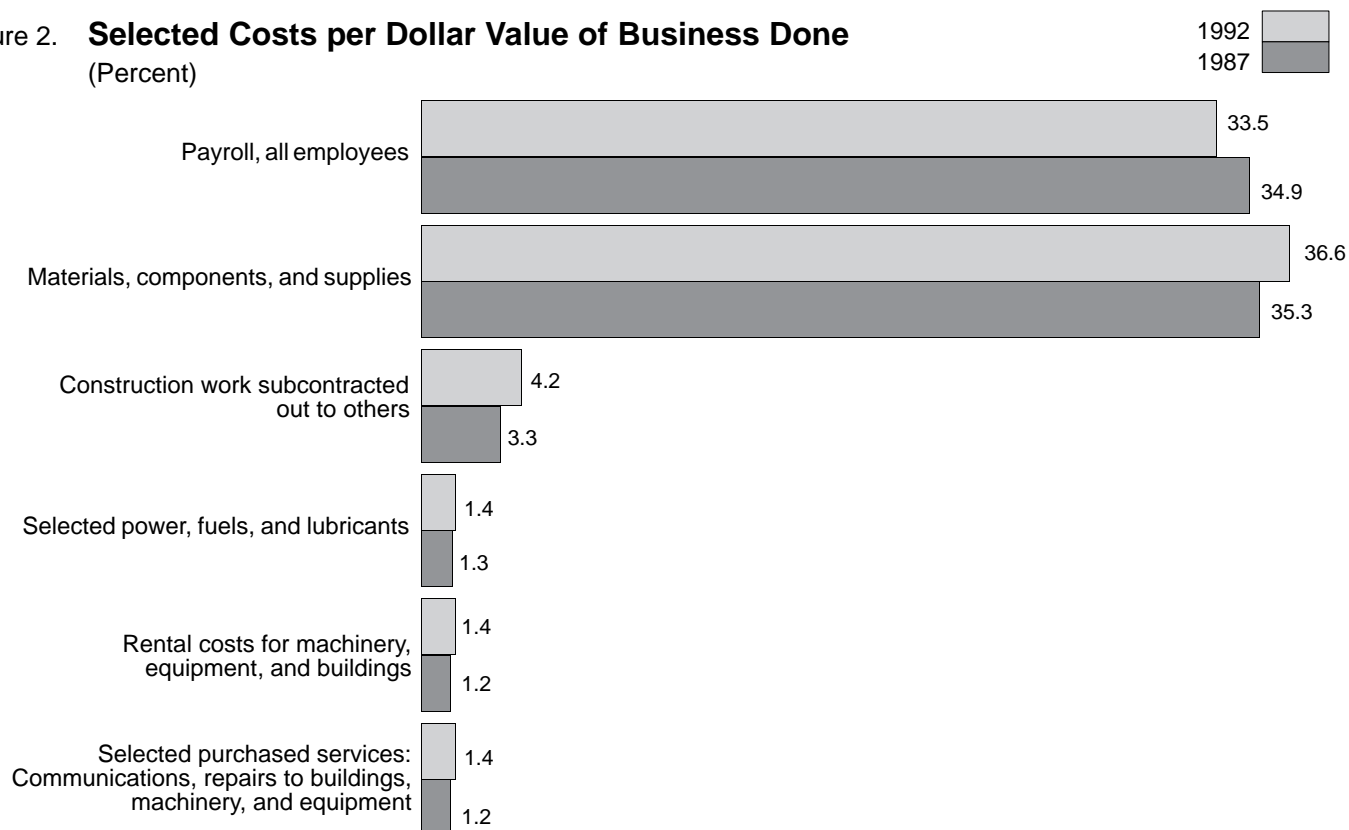


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	54 022	487 072	379 052	13 623 816	10 038 862	40 259 410	38 541 019	23 548 293	15 460 357
Alabama -----	654	6 756	5 412	141 907	102 150	464 828	430 120	254 651	181 044
Alaska -----	176	1 309	1 009	50 465	38 307	156 688	148 182	92 815	56 662
Arizona -----	768	7 176	5 595	152 113	108 208	509 294	486 802	255 321	237 904
Arkansas -----	434	3 546	2 810	71 794	55 023	229 900	224 065	125 889	99 697
California -----	6 077	50 159	37 866	1 559 249	1 115 200	4 813 283	4 557 223	2 734 326	1 866 458
Colorado -----	898	9 195	7 332	238 684	185 049	722 211	697 404	398 410	304 501
Connecticut -----	1 004	6 009	4 576	191 330	135 729	570 551	551 858	326 834	229 261
Delaware -----	181	1 554	1 196	43 425	32 926	120 683	116 247	71 758	45 265
District of Columbia -----	30	355	256	10 946	6 973	32 262	31 851	20 236	11 615
Florida -----	3 643	31 983	25 019	696 199	494 589	2 202 452	2 119 300	1 201 376	941 447
Georgia -----	1 407	13 887	10 823	337 111	246 409	982 595	943 510	556 079	396 579
Hawaii -----	270	3 081	2 364	98 027	68 850	326 173	312 081	194 537	119 302
Idaho -----	273	1 635	1 297	41 880	31 997	133 906	130 806	76 451	55 582
Illinois -----	2 336	23 636	18 390	845 207	638 089	2 333 980	2 218 217	1 412 000	823 587
Indiana -----	1 053	11 724	9 211	320 473	240 942	903 341	862 095	535 416	347 973
Iowa -----	507	4 349	3 361	112 853	83 893	341 373	332 572	206 608	129 765
Kansas -----	445	3 687	2 896	93 028	68 818	286 628	273 160	156 621	124 534
Kentucky -----	599	6 355	5 088	154 505	117 480	450 330	435 106	257 145	185 868
Louisiana -----	737	9 098	7 220	217 376	165 635	609 213	592 681	356 534	244 723
Maine -----	363	1 543	1 192	35 347	26 512	113 860	110 485	64 717	50 314
Maryland -----	1 281	13 459	10 389	361 050	255 213	1 044 831	1 018 324	603 062	425 900
Massachusetts -----	1 614	11 639	8 918	362 397	257 001	1 082 981	1 034 318	645 328	401 914
Michigan -----	1 840	16 327	12 394	504 834	370 821	1 374 604	1 315 622	857 420	471 817
Minnesota -----	1 208	9 776	7 650	309 345	235 534	829 235	802 143	501 336	326 084
Mississippi -----	341	2 581	2 038	50 424	38 223	161 764	154 691	98 715	59 145
Missouri -----	891	8 737	6 706	246 536	181 004	702 057	672 730	419 205	258 578
Montana -----	220	1 159	874	28 754	22 516	85 896	82 868	46 127	38 498
Nebraska -----	396	2 587	1 995	62 156	47 009	196 793	191 651	108 278	89 242
Nevada -----	305	3 555	2 781	97 153	73 474	313 664	282 064	172 207	111 866
New Hampshire -----	337	1 496	1 134	37 299	26 156	114 711	112 656	64 166	50 522
New Jersey -----	2 323	15 640	12 057	537 554	405 524	1 478 927	1 419 148	907 271	517 306
New Mexico -----	518	3 996	3 128	89 972	66 719	305 644	281 972	171 784	112 325
New York -----	3 898	35 867	28 030	1 240 243	933 598	3 439 187	3 283 874	2 120 531	1 181 748
North Carolina -----	1 860	15 227	12 197	313 705	227 072	948 060	905 650	518 022	400 952
North Dakota -----	203	1 077	837	23 568	19 190	86 897	83 400	46 009	38 063
Ohio -----	1 927	18 893	14 667	548 733	406 846	1 537 927	1 451 672	896 254	578 781
Oklahoma -----	579	4 443	3 464	102 082	74 703	311 558	300 054	180 292	127 960
Oregon -----	637	5 672	4 290	184 213	140 178	521 016	504 625	316 274	194 057
Pennsylvania -----	2 275	20 713	15 884	616 912	453 870	1 819 016	1 760 712	1 109 643	676 286
Rhode Island -----	330	1 364	997	38 153	26 768	114 924	112 062	63 961	49 769
South Carolina -----	666	7 662	6 355	177 785	137 048	482 458	466 286	290 165	179 403
South Dakota -----	166	1 107	868	22 701	17 344	79 878	73 915	44 210	31 476
Tennessee -----	779	9 669	7 543	236 231	165 389	695 778	672 550	398 939	285 852
Texas -----	2 899	33 662	26 194	804 653	567 424	2 764 654	2 651 816	1 709 420	984 646
Utah -----	354	3 278	2 601	85 349	66 740	270 236	260 857	158 854	104 434
Vermont -----	202	879	678	19 459	14 067	56 917	55 380	33 964	23 158
Virginia -----	1 413	13 448	10 661	331 203	235 797	959 376	919 972	525 171	407 642
Washington -----	1 205	12 887	10 183	395 855	306 917	1 111 703	1 066 891	615 052	463 125
West Virginia -----	261	2 149	1 780	55 757	46 049	145 823	143 718	92 182	52 348
Wisconsin -----	1 069	9 932	7 957	298 815	235 483	834 393	803 649	485 555	330 460
Wyoming -----	168	1 154	891	29 007	22 406	84 949	81 987	51 170	34 923

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
1 718 391	22 410 612	550 171	508 188	4 328 892	509 309	35 838 226	21 816 585	(Z)	(Z)	2	U.S.
*34 708	260 706	4 394	7 431	58 376	6 813	401 661	231 415	3	3	15	AL
8 506	132 878	3 279	2 672	16 223	917	101 691	64 367	6	5	23	AK
22 492	338 241	6 674	6 157	49 525	8 298	520 045	288 185	3	3	11	AZ
5 834	147 258	2 961	4 161	28 352	2 729	157 870	82 783	5	4	22	AR
256 059	3 028 065	93 005	50 584	491 248	57 797	4 866 723	2 864 117	1	1	7	CA
24 807	466 795	9 468	11 283	73 415	8 173	566 983	343 119	2	2	10	CO
18 694	272 126	6 624	4 321	52 640	8 534	641 327	414 076	2	2	10	CT
4 436	63 042	1 516	783	11 586	1 622	108 491	66 166	4	2	38	DE
411	16 158	258	(S)	2 699	1 629	121 580	92 759	10	6	(S)	DC
83 152	1 376 598	33 443	25 826	232 167	36 281	1 998 988	1 130 468	1	1	7	FL
39 085	556 843	15 249	11 505	119 381	16 633	1 014 997	591 669	2	2	11	GA
14 092	256 734	6 452	6 418	39 946	1 949	198 600	117 010	2	2	5	HI
3 100	97 449	2 021	3 144	12 127	1 116	61 817	35 589	6	6	20	ID
115 763	1 407 588	30 878	34 545	253 435	23 636	1 970 662	1 264 271	1	1	8	IL
41 246	409 320	9 216	10 195	99 928	9 571	637 738	402 616	2	1	7	IN
8 801	158 772	4 116	5 411	49 612	3 293	206 954	113 136	4	2	10	IA
13 468	156 793	3 272	3 285	38 611	4 527	309 805	189 133	3	3	13	KS
15 224	272 254	5 407	6 726	49 268	5 539	329 504	182 360	3	3	18	KY
16 532	344 198	6 994	6 124	52 874	7 874	493 263	307 090	3	2	9	LA
3 375	48 448	869	*1 136	10 897	2 065	131 004	76 734	7	6	44	ME
26 507	665 866	13 531	12 878	107 632	14 646	942 257	577 073	2	2	15	MD
48 664	662 404	13 045	10 046	94 007	17 067	1 203 412	738 819	2	2	14	MA
58 982	774 119	18 755	24 073	177 334	15 096	1 228 011	785 131	2	1	7	MI
27 092	422 625	10 657	12 026	86 911	8 581	687 612	416 607	2	2	9	MN
7 072	63 501	2 505	2 190	35 769	2 277	126 990	72 997	5	5	21	MS
29 327	433 348	6 183	12 307	95 240	9 164	698 478	438 183	2	2	17	MO
3 028	50 865	851	2 926	12 321	756	44 169	27 956	6	7	36	MT
5 142	113 401	1 772	2 623	27 607	2 641	175 141	101 639	3	3	10	NE
31 600	274 658	5 028	3 834	29 767	2 768	244 191	144 674	3	3	15	NV
2 055	61 179	1 696	1 301	13 936	2 609	166 088	93 314	5	5	17	NH
59 779	672 603	19 506	15 214	140 809	20 708	1 504 610	941 688	1	1	7	NJ
23 673	164 649	3 653	5 833	42 007	2 805	207 144	109 824	3	3	14	NM
155 313	1 579 533	45 158	25 918	278 394	45 658	3 803 434	2 560 106	1	1	5	NY
42 410	451 668	10 711	12 756	123 976	16 338	880 489	469 475	2	2	12	NC
3 497	17 245	1 360	1 948	19 794	980	56 340	30 485	6	7	36	ND
86 255	793 901	16 657	18 798	173 422	16 303	1 160 626	700 493	1	1	5	OH
11 504	152 456	4 440	5 956	42 597	4 006	231 531	129 881	3	3	18	OK
16 391	305 011	7 559	8 656	63 504	4 214	301 654	184 236	2	2	6	OR
58 304	781 343	20 283	20 094	170 808	20 678	1 530 536	983 939	1	1	8	PA
2 862	49 926	927	1 727	12 359	1 883	138 815	87 134	4	3	35	RI
16 172	281 505	8 296	5 272	76 199	9 542	455 758	281 256	2	2	13	SC
*5 964	37 717	1 179	*2 212	17 604	730	40 111	21 616	7	9	43	SD
23 228	370 933	7 495	10 016	83 117	11 012	648 989	398 487	2	2	10	TN
112 838	1 467 141	36 544	36 158	293 702	32 827	2 065 300	1 226 320	1	1	6	TX
9 379	183 166	3 880	6 650	39 100	2 612	192 262	100 874	5	3	12	UT
1 537	15 533	609	598	6 526	1 056	65 946	36 384	6	5	33	VT
39 403	587 577	13 604	12 333	100 833	14 928	923 952	534 661	2	1	7	VA
44 812	720 470	17 067	14 156	100 299	8 564	638 499	374 240	2	1	9	WA
2 105	67 390	(S)	(S)	16 201	1 742	96 078	64 001	6	5	(S)	WV
(S)	338 436	8 657	13 153	91 300	7 128	483 991	294 711	2	1	10	WI
2 962	40 180	1 492	2 216	13 509	969	56 090	33 298	4	5	18	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year -----	54 022	49 436	39 563	36 764	(Z)	(Z)	1	1
Proprietors and working partners -----	16 431	11 406	11 792	18 574	1	3	2	2
All employees** -----	487 072	509 309	434 764	356 591	(Z)	1	(Z)	(Z)
Construction workers:								
March -----	368 289	395 113	345 368	277 202	(Z)	1	(Z)	(Z)
May -----	371 673	396 921	348 303	291 843	(Z)	1	(Z)	(Z)
August -----	395 949	422 196	356 276	309 833	(Z)	1	(Z)	(Z)
November -----	380 299	409 699	342 666	308 046	(Z)	1	1	(Z)
Average -----	379 052	405 982	351 894	296 946	(Z)	(Z)	(Z)	(Z)
Other employees:								
March -----	105 945	101 194	82 748	58 138	1	1	1	1
May -----	107 140	103 171	(NA)	(NA)	1	1	(NA)	(NA)
August -----	107 580	103 391	(NA)	(NA)	1	1	(NA)	(NA)
November -----	111 412	105 582	(NA)	(NA)	1	1	(NA)	(NA)
Average -----	108 019	103 334	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees -----	13 623 816	12 663 516	9 106 563	5 482 519	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers -----	10 038 862	9 621 993	7 346 536	4 496 695	(Z)	(Z)	(Z)	(Z)
Payroll, other employees -----	3 584 954	3 041 522	1 760 027	985 825	(Z)	(Z)	(Z)	(Z)
First-quarter payroll, all employees -----	3 167 880	2 957 539	2 164 750	1 220 111	(Z)	1	(Z)	(Z)
Fringe benefits, all employees -----	3 602 516	2 962 599	1 619 494	1 094 744	(Z)	(Z)	(Z)	(Z)
Legally required expenditures -----	1 968 666	1 927 854	1 241 780	501 993	(Z)	1	(Z)	(Z)
Voluntary expenditures -----	1 633 850	1 034 745	377 714	592 751	1	1	(Z)	(Z)
Dollar value of business done -----	40 727 041	36 275 257	26 441 085	14 481 842	(Z)	(Z)	(Z)	(Z)
Value of construction work -----	40 259 410	35 838 226	25 948 527	14 221 277	(Z)	(Z)	(Z)	(Z)
Value of construction work subcontracted in from others -----	22 410 612	16 067 963	10 822 978	6 928 640	1	1	1	(Z)
Other business receipts -----	467 631	437 030	492 558	260 565	3	2	1	2
Net value of construction work† -----	38 541 019	34 657 764	25 252 434	13 919 122	(Z)	(Z)	(Z)	(Z)
Value added†† -----	23 548 293	21 816 585	15 122 619	8 748 490	(Z)	(Z)	(Z)	(Z)
Selected costs -----	17 178 748	14 458 671	11 318 466	5 733 353	(Z)	1	(Z)	(Z)
Materials, components, and supplies -----	14 892 772	12 788 495	10 234 565	5 239 950	(Z)	(Z)	(Z)	(Z)
Construction work subcontracted out to others -----	1 718 391	1 180 462	696 092	302 156	1	3	1	2
Selected power, fuels, and lubricants -----	567 585	489 713	387 808	191 247	1	1	1	1
Electricity -----	105 737	81 132	56 613	27 989	1	1	1	1
Natural and manufactured gas -----	19 334	16 935	13 679	8 881	2	2	2	3
Gasoline and diesel fuel -----	423 321	362 957	294 679	140 452	1	1	1	1
On highway use -----	383 318	337 671	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use -----	40 003	25 286	(NA)	(NA)	5	2	(NA)	(NA)
Other, including lubricating oils and greases -----	19 194	28 688	22 836	13 926	2	2	2	2
Rental cost for machinery, equipment, and buildings -----	550 171	440 512	238 416	104 368	1	1	1	1
For machinery and equipment -----	258 385	201 939	133 087	59 322	1	1	1	1
For buildings -----	291 786	238 573	105 329	45 046	1	1	1	1
Selected purchased services -----	569 248	417 485	271 747	177 895	1	1	1	3
Communication services -----	259 880	198 070	119 242	74 206	1	1	1	2
Repairs to buildings and other structures -----	38 080	36 019	23 866	14 250	2	2	1	2
Repairs to machinery and equipment -----	271 289	183 395	128 638	89 439	1	1	1	5
Ownership of construction projects:								
Value of construction work -----	40 259 410	35 838 226	25 948 527	14 221 277	(Z)	(Z)	(Z)	(Z)
Government owned -----	9 364 753	6 270 845	3 743 799	2 525 096	1	2	1	(Z)
Federal -----	2 646 426	2 072 994	(NA)	(NA)	2	4	(NA)	(NA)
State and local -----	6 718 326	4 197 850	(NA)	(NA)	1	1	(NA)	(NA)
Privately owned -----	30 894 657	29 567 381	22 204 727	11 696 182	1	1	(Z)	(Z)

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	4 020 723	2 966 533	1	1
Capital expenditures, other than land -----	508 188	495 613	2	1
New -----	393 700	387 094	2	2
Used -----	114 488	108 519	3	4
Retirements and disposition of depreciable assets -----	200 019	125 188	3	2
End-of-year gross book value of depreciable assets -----	4 328 892	3 336 958	1	1
Depreciation charges during year -----	494 480	442 076	1	1
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	722 104	774 678	3	2
Capital expenditures, other than land -----	55 881	80 605	5	4
New buildings and other structures -----	40 367	51 657	6	4
Used buildings and other structures -----	15 515	28 948	9	9
Retirements and disposition of depreciable assets -----	26 848	17 780	10	5
End-of-year gross book value of depreciable assets -----	751 137	837 503	2	2
Depreciation charges during year -----	58 071	77 985	4	2
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	3 298 619	2 191 855	1	1
Capital expenditures, other than land -----	452 307	415 008	2	1
New machinery and equipment, including automobiles and trucks -----	353 333	335 437	2	2
New automobiles and trucks, intended primarily for highway use -----	185 547	226 797	3	2
Used machinery and equipment, including automobiles and trucks -----	98 974	79 570	3	3
Retirements and disposition of depreciable assets -----	173 171	107 408	3	2
End-of-year gross book value of depreciable assets -----	3 577 755	2 499 455	1	1
Depreciation charges during year -----	436 409	364 090	1	1

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	54 022	(Z)
Value of construction work	40 259 410	(Z)
Establishments with inventories:		
Number	25 991	1
Value of construction work	24 282 236	(Z)
Inventories ¹ :		
End of 1992, materials and supplies	730 998	2
End of 1991, materials and supplies	710 862	2
Establishments with no inventories:		
Number	13 461	1
Value of construction work	9 022 694	1
Establishments not reporting:		
Number	14 570	1
Value of construction work	6 954 480	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments	54 022	32 138	10 639	6 316	3 433	981	400	94	20	2
All employees**	487 072	61 683	68 046	83 378	101 907	66 605	57 542	31 973	15 937	(D)
Payroll, all employees	13 623 816	1 130 161	1 559 936	2 170 575	2 938 594	2 167 495	1 958 035	1 113 387	585 634	(D)
Dollar value of business done	40 727 041	4 469 219	4 712 475	6 431 235	8 584 348	6 141 669	5 476 657	3 057 089	1 854 349	(D)
Value of construction work	40 259 410	4 428 930	4 637 929	6 350 293	8 497 045	6 076 932	5 391 350	3 025 145	1 851 787	(D)
Net value of construction work†	38 541 019	4 282 183	4 503 211	6 102 620	8 143 307	5 767 188	5 110 724	2 871 587	1 760 199	(D)
Value added††	23 548 293	2 459 743	2 727 977	3 644 812	4 917 630	3 534 045	3 178 626	1 835 545	1 249 914	(D)
Cost of materials, components, supplies, and fuels	15 460 357	1 862 730	1 849 780	2 538 751	3 312 979	2 297 879	2 017 405	1 067 986	512 847	(D)
Cost of construction work subcontracted out to others	1 718 391	146 747	134 718	247 672	353 738	309 744	280 626	153 558	91 588	(D)
Rental cost for machinery, equipment, and buildings	550 171	59 002	65 369	102 524	107 027	78 568	60 195	41 060	36 424	(D)
Capital expenditures, other than land	508 188	78 923	67 566	94 414	108 398	80 005	41 703	24 925	12 254	(D)
End-of-year gross book value of depreciable assets	4 328 892	621 817	577 683	777 718	931 680	651 442	423 197	215 158	130 197	(D)
1987										
All employees**	509 309	54 411	72 593	84 775	107 146	65 776	71 866	30 252	12 615	9 871
Value of construction work	35 838 226	3 432 481	4 088 965	5 402 040	7 675 104	5 029 064	5 805 988	2 542 384	1 862 198	(D)
Value added††	21 816 585	1 916 741	2 434 840	3 248 485	4 610 927	2 961 120	3 623 087	1 728 709	644 269	648 406
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees**	(Z)	2	2	2	1	(Z)	(Z)	(Z)	(Z)	(D)
Net value of construction work†	(Z)	2	2	2	1	(Z)	(Z)	(Z)	(Z)	(D)
Capital expenditures, other than land	2	6	7	5	2	(Z)	(Z)	(Z)	(Z)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments	54 022	(S)	(S)	7 559	15 538	10 121	6 453	4 683	1 685	792	509
All employees**	487 072	(S)	(S)	11 201	42 779	54 393	63 997	91 497	63 746	55 786	98 101
Payroll, all employees	13 623 816	(S)	(S)	151 335	742 705	1 144 645	1 530 143	2 497 235	1 930 406	1 873 587	3 700 884
Dollar value of business done	40 727 041	(S)	(S)	561 188	2 515 235	3 551 809	4 513 897	7 155 366	5 750 097	5 371 973	11 122 695
Value of construction work	40 259 410	(S)	(S)	555 469	2 490 590	3 520 762	4 450 717	7 052 447	5 683 927	5 308 601	11 013 926
Net value of construction work†	38 541 019	(S)	(S)	543 173	2 443 148	3 447 868	4 334 001	6 774 985	5 414 104	5 062 311	10 342 485
Value added††	23 548 293	(S)	(S)	315 614	1 454 843	2 014 273	2 629 357	4 073 978	3 244 189	3 147 717	6 563 034
Cost of materials, components, supplies, and fuels	15 460 357	(S)	(S)	233 278	1 012 950	1 464 642	1 767 824	2 803 926	2 236 085	1 977 966	3 888 220
Cost of construction work subcontracted out to others	1 718 391	(S)	(S)	12 297	47 442	72 894	116 716	277 462	269 823	246 290	671 441
Rental cost for machinery, equipment, and buildings	550 171	(S)	(S)	6 811	32 367	51 964	67 483	105 222	72 696	65 194	146 769
Capital expenditures, other than land	508 188	(S)	(S)	(S)	44 212	57 491	74 175	96 520	72 653	66 053	85 900
End-of-year gross book value of depreciable assets	4 328 892	(S)	(S)	79 366	352 241	472 293	612 735	832 611	610 487	536 928	803 462
1987											
All employees**	509 309	(S)	(S)	(S)	48 865	55 374	69 061	90 135	68 343	60 692	96 863
Value of construction work	35 838 226	(S)	(S)	(S)	2 423 291	2 961 243	4 196 781	6 248 725	5 227 696	4 780 523	9 305 177
Value added††	21 816 585	(S)	(S)	(S)	1 390 618	1 782 985	2 503 198	3 748 820	3 067 759	2 917 043	6 015 924
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	(Z)	(S)	(S)	3	2	2	2	1	(Z)	(Z)	(Z)
Net value of construction work†	(Z)	(S)	(S)	3	2	2	2	1	(Z)	(Z)	(Z)
Capital expenditures, other than land	2	(S)	(S)	(S)	7	7	7	4	1	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	40 259 410	18 936 375	12 066 037	6 346 601	(Z)	(Z)	1	1
Building construction	32 321 030	16 141 665	10 760 584	5 418 781	(Z)	(Z)	1	1
Single-family houses	4 648 845	2 811 640	1 016 034	821 172	1	2	2	2
Single-family houses, detached	4 038 338	2 438 023	894 936	705 379	1	2	2	2
Single-family houses, attached, including townhouses and townhouse-type condominiums	610 508	373 617	121 098	115 793	3	4	4	3
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	939 455	505 141	227 026	207 287	2	3	3	5
Other residential buildings, including hotels, motels, and tourist cabins	553 928	296 322	150 857	106 749	2	2	3	5
Hotels, motels, and tourist cabins	447 359	238 357	123 391	85 612	2	2	3	3
Other residential buildings	106 569	57 965	27 467	21 137	8	9	9	20
Office buildings	5 926 949	2 443 593	2 536 146	947 209	1	1	1	1
Other commercial buildings such as stores, restaurants, and automobile service stations	5 356 277	2 894 911	1 518 917	942 449	1	1	2	2
Industrial buildings and warehouses	7 960 564	3 584 673	2 797 219	1 578 672	1	1	1	1
Industrial buildings	6 934 233	3 042 163	2 478 597	1 413 473	1	1	1	1
Warehouses	1 026 331	542 510	318 622	165 199	1	2	2	2
Religious buildings	445 301	211 239	152 295	81 767	2	3	3	3
Educational buildings	2 468 614	1 311 812	902 023	254 780	1	1	2	2
Hospitals and institutional buildings	2 904 932	1 450 109	1 149 073	305 751	1	1	1	2
Farm buildings, nonresidential	155 908	68 244	40 134	47 529	6	8	6	6
Amusement, social, and recreational buildings, indoors	337 464	221 022	78 787	37 655	2	3	4	5
Other nonresidential buildings	622 792	342 958	192 073	87 762	3	3	5	8
Nonbuilding construction	5 027 983	2 794 710	1 305 453	927 820	1	1	1	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 217 037	814 439	232 468	170 130	2	2	3	2
Power and communication transmission lines, towers, and related facilities	1 700 780	900 591	460 261	339 928	2	2	2	4
Mass transit construction	286 861	197 916	83 803	5 142	1	1	1	2
Blast furnaces, petroleum refineries, chemical complexes, etc.	670 432	265 897	199 205	205 330	2	1	4	1
Power plants	508 076	219 539	166 174	122 363	1	2	2	2
Power plants, nuclear	64 700	23 904	26 445	14 350	2	1	2	7
Power plants and cogeneration plants, except nuclear	443 376	195 635	139 729	108 012	1	2	2	2
Sewage treatment and water treatment plants	231 097	163 769	56 849	10 480	3	2	6	10
Sewage treatment plants	197 535	143 928	45 694	7 913	3	2	6	12
Water treatment plants	33 563	19 841	11 155	2 567	9	14	7	13
Other nonbuilding construction	413 700	232 560	106 694	74 447	5	6	6	9
Construction work, n.s.k.	2 910 397	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
1987								
Value of construction work	35 838 226	19 124 238	9 826 818	5 229 657	(Z)	1	1	1
Building construction	29 056 063	16 570 385	8 141 801	4 343 881	(Z)	1	1	1
Single-family houses	4 164 610	2 773 371	757 296	633 943	1	1	2	2
Single-family houses, detached	3 460 344	2 234 563	673 924	551 856	1	2	2	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	704 266	538 807	83 371	82 087	2	2	5	4
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	1 284 568	901 414	202 031	181 122	2	2	4	3
Other residential buildings, including hotels, motels, and tourist cabins	1 091 273	701 239	244 016	146 017	1	1	3	3
Hotels, motels, and tourist cabins	772 646	539 245	160 204	73 197	1	1	4	4
Other residential buildings	318 626	161 994	83 812	72 820	3	3	4	5
Office buildings	7 127 066	3 830 394	2 407 202	889 469	1	1	1	1
Other commercial buildings such as stores, restaurants, and automobile service stations	4 604 330	2 638 884	1 154 483	810 964	1	1	2	2
Industrial buildings and warehouses	6 548 566	3 436 698	1 941 105	1 170 762	1	1	1	1
Industrial buildings	5 580 302	2 815 151	1 733 725	1 031 425	1	1	1	1
Warehouses	968 264	621 547	207 380	139 337	1	2	2	2
Religious buildings	354 962	189 609	100 281	65 071	2	3	3	6
Educational buildings	1 246 465	685 961	423 927	136 576	1	2	2	3
Hospitals and institutional buildings	1 822 402	970 412	685 928	166 061	1	1	1	3
Farm buildings, nonresidential	127 201	39 593	45 911	41 696	6	7	12	6
Amusement, social, and recreational buildings, indoors	257 214	167 033	54 835	35 344	3	4	3	4
Other nonresidential buildings	427 401	235 771	124 781	66 848	3	3	5	7
Nonbuilding construction	5 124 653	2 553 856	1 685 018	885 779	1	2	1	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	782 517	470 547	188 150	123 819	2	2	2	2
Power and communication transmission lines, towers, and related facilities	2 257 271	1 100 055	758 745	398 471	3	4	1	4
Mass transit construction	335 253	150 339	164 747	20 166	1	2	1	1
Blast furnaces, petroleum refineries, chemical complexes, etc.	379 422	131 027	166 953	81 441	2	3	1	5
Power plants	543 989	254 175	196 774	93 039	1	1	1	2
Power plants, nuclear	143 961	53 095	66 954	23 910	(Z)	(Z)	(Z)	(Z)
Power plants and cogeneration plants, except nuclear	400 028	201 080	129 819	69 128	1	1	1	3
Sewage treatment and water treatment plants	173 221	120 576	35 443	17 200	4	5	5	10
Sewage treatment plants	126 912	86 381	27 795	12 735	5	5	5	9
Water treatment plants	46 308	34 195	7 648	4 464	8	7	10	22
Other nonbuilding construction	652 979	327 136	174 206	151 642	5	5	9	7
Construction work, n.s.k.	1 657 513	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments -----	54 022	487 072	13 623 816	40 259 410	19 809 604	38 541 019	23 548 293	1 718 391	(Z)	(Z)	1
Establishments not specializing by type -----	16 422	191 153	5 533 869	16 378 329	(NA)	15 695 922	9 316 771	682 407	1	1	1
Establishments specializing 51 percent or more -----	37 601	295 918	8 089 947	23 881 081	19 809 604	22 845 097	14 231 521	1 035 984	1	(Z)	2
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	13 447	51 625	1 041 373	3 296 264	2 700 907	3 223 471	1 901 457	72 793	2	2	8
Establishments with —											
100 percent specialization -----	3 882	11 334	213 768	740 018	740 018	725 967	420 556	14 051	5	4	25
90 to 99 percent specialization -----	2 693	11 420	231 723	713 594	664 468	701 894	409 221	11 701	5	4	14
80 to 89 percent specialization -----	2 060	7 521	159 225	496 618	407 826	483 505	284 917	13 113	5	5	29
70 to 79 percent specialization -----	2 350	10 252	200 052	614 181	446 419	604 590	365 822	9 591	4	4	20
60 to 69 percent specialization -----	1 873	8 458	180 000	572 109	354 921	550 458	327 593	21 651	6	5	7
51 to 59 percent specialization -----	587	2 640	56 605	159 744	87 256	157 058	93 348	2 687	10	9	20
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	541	2 217	46 658	161 779	127 559	160 317	93 869	1 462	10	13	22
Establishments with —											
100 percent specialization -----	198	564	9 980	42 680	42 680	42 180	24 480	*500	20	20	41
90 to 99 percent specialization -----	*30	229	5 564	14 669	13 801	(D)	9 042	(D)	34	32	(D)
80 to 89 percent specialization -----	65	456	8 805	23 860	19 192	23 852	15 578	(S)	21	23	(S)
70 to 79 percent specialization -----	83	268	6 755	*30 893	*22 684	*30 824	*18 380	*69	22	49	59
60 to 69 percent specialization -----	(S)	489	11 086	(S)	(S)	(S)	(S)	(S)	22	(S)	(S)
51 to 59 percent specialization -----	28	212	4 468	15 314	8 395	(D)	8 405	(D)	28	29	(D)
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type -----	645	4 596	109 720	344 334	275 011	325 275	193 032	19 059	6	6	11
Establishments with —											
100 percent specialization -----	171	867	18 331	76 675	76 675	71 346	44 181	5 329	17	18	37
90 to 99 percent specialization -----	83	895	20 656	55 342	50 983	54 366	34 716	976	9	11	20
80 to 89 percent specialization -----	107	615	12 955	46 094	37 558	45 686	23 333	409	18	16	8
70 to 79 percent specialization -----	130	925	25 217	76 489	55 669	66 976	40 107	9 514	13	9	3
60 to 69 percent specialization -----	146	1 100	26 658	73 570	45 434	70 950	40 687	2 620	15	15	18
51 to 59 percent specialization -----	7	194	5 902	16 164	8 692	15 953	10 007	*211	11	10	42
OFFICE BUILDINGS											
All establishments specializing in type -----	2 636	36 445	1 220 128	3 297 144	2 574 867	3 191 547	2 019 053	105 597	2	1	5
Establishments with —											
100 percent specialization -----	671	6 477	238 331	632 410	632 410	614 698	404 056	17 712	4	3	10
90 to 99 percent specialization -----	387	5 542	173 220	441 220	412 211	430 142	288 019	11 078	5	4	9
80 to 89 percent specialization -----	387	6 920	254 337	648 531	529 950	632 558	409 625	15 973	3	2	17
70 to 79 percent specialization -----	451	5 359	168 278	510 200	368 848	486 412	285 733	23 788	4	4	13
60 to 69 percent specialization -----	498	7 744	239 108	659 163	407 120	635 686	389 420	23 477	4	3	9
51 to 59 percent specialization -----	243	4 402	146 854	405 621	224 329	392 052	242 200	13 569	4	4	6
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	3 687	35 460	949 838	3 159 763	2 588 358	3 015 346	1 920 497	144 417	2	2	6
Establishments with —											
100 percent specialization -----	1 128	9 830	265 234	1 133 451	1 133 451	1 079 577	798 725	53 874	4	2	2
90 to 99 percent specialization -----	371	3 394	89 477	254 279	238 196	245 958	142 671	8 321	7	9	30
80 to 89 percent specialization -----	538	4 633	130 022	363 116	300 995	354 483	211 201	8 633	6	5	12
70 to 79 percent specialization -----	658	6 962	193 198	604 356	435 153	557 103	313 109	47 253	5	5	17
60 to 69 percent specialization -----	674	7 494	189 625	567 627	350 195	549 620	317 199	18 006	4	4	6
51 to 59 percent specialization -----	319	3 148	82 281	236 935	130 368	228 604	137 593	8 331	7	6	9
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	4 095	57 475	1 836 488	4 847 049	3 748 522	4 645 768	2 972 729	201 281	1	1	2
Establishments with —											
100 percent specialization -----	1 053	11 423	346 479	840 576	840 576	810 066	538 330	30 510	3	3	6
90 to 99 percent specialization -----	598	7 295	226 172	606 818	566 621	587 642	372 020	19 176	4	4	3
80 to 89 percent specialization -----	755	10 282	327 063	857 482	706 792	830 690	550 492	26 792	3	3	3
70 to 79 percent specialization -----	690	8 782	285 423	785 657	578 308	743 094	465 197	42 563	4	3	3
60 to 69 percent specialization -----	709	11 613	386 511	1 097 363	693 014	1 043 216	634 349	54 147	3	2	7
51 to 59 percent specialization -----	289	8 081	264 839	659 154	363 210	631 059	412 341	28 094	2	2	2
WAREHOUSES											
All establishments specializing in type -----	219	1 275	34 874	109 044	86 261	105 088	61 411	3 956	12	9	14
Establishments with —											
100 percent specialization -----	40	232	7 676	28 068	28 068	25 786	16 064	2 282	17	11	4
90 to 99 percent specialization -----	76	161	4 304	14 309	13 073	13 574	6 078	*735	27	19	61
80 to 89 percent specialization -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
70 to 79 percent specialization -----	29	408	13 752	37 168	26 613	36 738	22 666	430	11	10	38
60 to 69 percent specialization -----	53	317	6 105	18 199	11 518	17 811	10 915	*388	36	34	68
51 to 59 percent specialization -----	*13	*116	*2 277	*7 693	*4 103	*7 580	*4 042	*113	42	45	43

12-10 ELECTRICAL WORK

CONSTRUCTION—INDUSTRY SERIES

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992—Con.

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
EDUCATIONAL BUILDINGS											
All establishments specializing in type -----	893	9 435	255 569	812 578	594 112	770 179	424 720	42 399	4	3	6
Establishments with —											
100 percent specialization -----	140	760	25 038	73 837	73 837	69 772	42 793	4 065	18	15	17
90 to 99 percent specialization -----	100	980	26 126	91 127	84 352	85 049	42 435	6 078	13	10	25
80 to 89 percent specialization -----	132	1 218	32 781	116 269	94 417	108 855	56 036	7 414	9	9	9
70 to 79 percent specialization -----	200	2 363	62 894	198 196	144 528	188 088	97 602	10 108	7	6	12
60 to 69 percent specialization -----	213	2 525	64 763	208 791	128 904	199 652	111 846	9 139	9	7	14
51 to 59 percent specialization -----	108	1 590	43 967	124 358	68 073	118 762	74 008	5 596	10	8	9
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type -----	544	8 673	287 664	859 627	618 672	814 318	492 311	45 309	3	3	7
Establishments with —											
100 percent specialization -----	135	1 440	48 612	130 323	130 323	122 103	77 798	8 221	7	7	11
90 to 99 percent specialization -----	46	500	13 706	39 550	36 048	39 151	25 521	398	21	17	10
80 to 89 percent specialization -----	92	690	18 261	61 319	49 666	54 843	31 382	*6 476	13	15	48
70 to 79 percent specialization -----	92	1 984	71 397	214 737	156 208	207 586	130 930	7 151	5	5	9
60 to 69 percent specialization -----	81	2 481	88 586	264 824	163 342	253 961	145 081	10 863	2	2	1
51 to 59 percent specialization -----	98	1 577	47 103	148 873	83 085	136 673	81 598	12 200	8	9	4
HIGHWAYS, STREETS, AND RELATED WORK SUCH AS INSTALLATION OF GUARD RAILS, HIGHWAY SIGNS, LIGHTING, ETC.											
All establishments specializing in type -----	407	8 065	251 672	902 769	793 754	843 234	456 196	59 536	3	3	6
Establishments with —											
100 percent specialization -----	237	3 445	112 954	386 046	386 046	361 859	191 158	24 186	5	4	6
90 to 99 percent specialization -----	67	1 687	56 008	199 669	185 646	185 197	113 475	14 472	9	7	21
80 to 89 percent specialization -----	30	1 092	18 896	95 531	80 136	86 012	32 569	9 519	9	8	6
70 to 79 percent specialization -----	28	645	20 176	72 216	52 155	67 144	42 320	5 071	10	10	6
60 to 69 percent specialization -----	23	703	25 092	91 626	58 229	88 832	46 404	2 794	6	3	3
51 to 59 percent specialization -----	22	492	18 547	57 682	31 542	54 189	30 270	3 493	8	6	5
POWER AND COMMUNICATION TRANSMISSION LINES, TOWERS, AND RELATED FACILITIES											
All establishments specializing in type -----	1 023	16 618	466 886	1 385 086	1 314 773	1 235 076	837 863	150 009	2	2	11
Establishments with —											
100 percent specialization -----	881	13 628	372 507	1 093 047	1 093 047	972 955	659 128	120 093	3	3	14
90 to 99 percent specialization -----	24	549	16 385	47 059	43 943	43 981	31 579	3 077	15	18	5
80 to 89 percent specialization -----	28	1 172	33 300	98 232	80 837	85 143	60 715	13 089	8	8	10
70 to 79 percent specialization -----	32	331	14 564	46 737	34 817	(D)	25 214	(D)	25	11	(D)
60 to 69 percent specialization -----	21	767	26 711	87 985	55 776	78 504	54 083	9 482	6	4	1
51 to 59 percent specialization -----	37	172	3 418	12 025	6 352	(D)	7 145	(D)	16	15	(D)
BLAST FURNACES, PETROLEUM REFINERIES, CHEMICAL COMPLEXES, ETC.											
All establishments specializing in type -----	195	8 697	266 254	561 968	480 026	546 448	384 806	15 520	2	2	2
Establishments with —											
100 percent specialization -----	86	4 090	121 118	252 410	252 410	249 067	190 783	3 342	1	1	1
90 to 99 percent specialization -----	19	818	23 662	52 959	49 493	51 578	33 177	1 381	16	17	23
80 to 89 percent specialization -----	18	1 128	37 579	62 661	50 863	(D)	44 272	(D)	7	7	(D)
70 to 79 percent specialization -----	22	1 721	50 674	109 466	79 111	105 866	60 240	3 600	1	1	(Z)
60 to 69 percent specialization -----	22	383	10 837	29 104	18 547	(D)	18 113	(D)	15	11	(D)
51 to 59 percent specialization -----	(S)	558	22 383	55 369	29 603	52 889	38 222	2 480	3	2	3
POWER PLANTS AND COGENERATION PLANTS, EXCEPT NUCLEAR											
All establishments specializing in type -----	109	2 035	75 565	184 932	158 646	178 961	140 652	5 971	4	4	7
Establishments with —											
100 percent specialization -----	48	777	20 445	50 824	50 824	47 413	32 914	3 411	6	7	9
90 to 99 percent specialization -----	(S)	*58	*975	*4 006	*3 605	*3 942	*2 397	*64	57	55	64
80 to 89 percent specialization -----	6	(S)	(S)	(S)	(S)	(D)	(S)	(D)	(S)	(S)	(D)
70 to 79 percent specialization -----	*18	253	8 879	29 553	21 481	28 563	17 667	990	9	9	28
60 to 69 percent specialization -----	*3	*27	*1 034	*3 146	*1 888	*3 087	*2 044	(S)	66	64	(S)
51 to 59 percent specialization -----	*4	*106	2 790	*8 463	*4 535	(D)	*4 985	(D)	50	48	(D)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	54 022	379 052	368 289	371 673	395 949	380 299	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Alabama	654	5 412	5 120	5 244	5 708	5 576	4	3	3	4	5	4
Alaska	176	1 009	848	975	1 236	975	4	6	7	7	7	5
Arizona	768	5 595	5 189	5 357	5 811	6 024	3	3	3	3	3	4
Arkansas	434	2 810	2 745	2 807	2 965	2 724	5	4	5	5	5	4
California	6 077	37 866	37 628	37 241	39 504	37 091	1	1	1	1	1	1
Colorado	898	7 332	6 635	7 027	7 808	7 856	3	2	3	2	3	3
Connecticut	1 004	4 576	4 389	4 422	4 846	4 645	2	2	2	2	2	2
Delaware	181	1 196	1 191	1 182	1 261	1 150	5	4	5	4	4	4
District of Columbia	30	256	270	248	252	254	14	9	11	9	11	9
Florida	3 643	25 019	24 252	24 577	25 746	25 502	1	1	1	1	1	1
Georgia	1 407	10 823	10 540	10 589	11 024	11 140	3	2	2	2	2	2
Hawaii	270	2 364	2 463	2 297	2 400	2 296	4	2	3	3	3	2
Idaho	273	1 297	1 183	1 229	1 387	1 390	5	6	7	8	8	6
Illinois	2 336	18 390	17 721	18 366	19 230	18 242	2	1	1	1	1	1
Indiana	1 053	9 211	8 958	8 782	9 738	9 364	2	2	1	2	2	2
Iowa	507	3 361	3 286	3 289	3 588	3 280	5	4	4	4	4	3
Kansas	445	2 896	2 799	2 806	3 057	2 924	4	3	3	4	4	4
Kentucky	599	5 088	4 853	5 101	5 560	4 838	4	3	3	3	3	3
Louisiana	737	7 220	7 334	7 408	7 299	6 839	4	2	2	3	2	2
Maine	363	1 192	1 088	1 098	1 355	1 227	5	7	8	7	9	8
Maryland	1 281	10 389	10 110	10 252	10 800	10 392	2	2	2	2	2	3
Massachusetts	1 614	8 918	8 623	8 397	9 394	9 258	1	2	2	2	2	2
Michigan	1 840	12 394	11 866	11 972	13 229	12 511	2	2	2	2	2	2
Minnesota	1 208	7 650	7 227	7 609	8 255	7 507	2	2	2	2	2	2
Mississippi	341	2 038	2 034	1 930	2 085	2 105	6	5	5	5	5	5
Missouri	891	6 706	6 452	6 463	7 203	6 705	3	2	2	2	3	3
Montana	220	874	797	836	924	939	4	6	6	5	8	7
Nebraska	396	1 995	1 902	1 971	2 104	2 002	4	3	3	4	3	3
Nevada	305	2 781	2 510	2 511	2 911	3 191	3	3	3	3	3	3
New Hampshire	337	1 134	1 002	1 055	1 288	1 189	3	4	4	5	5	6
New Jersey	2 323	12 057	12 025	11 638	12 491	12 076	2	1	1	1	2	2
New Mexico	518	3 128	3 028	3 101	3 182	3 200	4	3	3	3	3	4
New York	3 898	28 030	28 504	27 587	28 731	27 299	1	1	1	1	1	1
North Carolina	1 860	12 197	12 025	12 209	12 539	12 016	2	2	2	2	2	2
North Dakota	203	837	732	819	938	858	2	6	7	6	6	6
Ohio	1 927	14 667	14 336	14 342	15 259	14 732	2	1	1	1	1	1
Oklahoma	579	3 464	3 297	3 440	3 645	3 476	4	3	3	3	3	4
Oregon	637	4 290	4 016	4 082	4 606	4 454	3	3	3	3	3	3
Pennsylvania	2 275	15 884	15 629	15 518	16 588	15 801	2	2	1	2	2	2
Rhode Island	330	997	996	906	1 126	959	3	5	4	4	7	4
South Carolina	666	6 355	6 613	6 529	6 384	5 896	3	2	2	2	2	2
South Dakota	166	868	861	868	894	848	8	8	7	7	8	8
Tennessee	779	7 543	7 058	7 342	7 591	8 184	3	2	2	2	3	2
Texas	2 899	26 194	25 029	25 819	27 728	26 199	2	1	1	1	2	2
Utah	354	2 601	2 458	2 592	2 667	2 688	4	4	4	4	5	5
Vermont	202	678	685	619	726	681	2	6	6	6	6	7
Virginia	1 413	10 661	10 341	10 617	11 012	10 673	2	2	2	2	2	2
Washington	1 205	10 183	9 701	10 044	10 642	10 344	2	2	2	2	2	2
West Virginia	261	1 780	1 642	1 867	1 908	1 703	6	6	6	6	6	7
Wisconsin	1 069	7 957	7 426	7 843	8 427	8 130	2	2	2	2	2	2
Wyoming	168	891	870	847	898	948	2	4	4	4	5	6

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	40 259 410	53 856	36 996 785	8 561	3 262 624	35 838 226	12.3	(Z)	(Z)	1
Alabama -----	463 592	646	401 917	214	61 676	412 516	12.4	3	3	5
Alaska -----	167 823	175	152 439	19	15 384	119 830	40.1	5	5	4
Arizona -----	566 548	767	492 651	79	73 896	555 102	2.1	2	3	4
Arkansas -----	234 125	426	198 902	114	35 223	160 253	46.1	4	5	5
California -----	4 970 681	6 077	4 745 360	189	225 321	4 943 977	.5	1	1	2
Colorado -----	665 807	890	645 320	74	20 487	491 077	35.6	2	2	2
Connecticut -----	554 611	1 002	528 995	147	25 617	677 352	-18.1	2	2	12
Delaware -----	139 091	(S)	111 721	124	27 370	149 138	-6.7	2	3	5
District of Columbia -----	206 621	(S)	25 768	313	180 852	206 359	.1	2	6	2
Florida -----	2 215 337	3 630	2 090 008	230	125 328	2 020 666	9.6	2	2	2
Georgia -----	1 033 778	1 404	902 509	331	131 269	1 031 169	.3	2	2	15
Hawaii -----	336 236	270	326 173	33	10 062	214 122	57.0	2	2	12
Idaho -----	150 507	273	125 116	82	25 391	65 424	130.0	5	5	11
Illinois -----	2 383 160	2 313	2 247 659	283	135 501	1 979 707	20.4	1	1	2
Indiana -----	865 804	1 051	806 878	337	58 926	631 631	37.1	2	2	4
Iowa -----	334 580	506	311 770	117	22 811	196 638	70.2	2	2	3
Kansas -----	282 008	445	238 600	185	43 408	311 137	-9.4	3	3	5
Kentucky -----	483 060	592	381 409	294	101 651	324 919	48.7	2	3	3
Louisiana -----	583 338	735	538 983	114	44 356	479 179	21.7	2	2	6
Maine -----	122 686	363	111 714	83	10 972	137 439	-10.7	6	6	17
Maryland -----	960 688	1 280	836 980	280	123 708	838 040	14.6	2	2	4
Massachusetts -----	953 017	1 603	922 525	175	30 492	1 162 804	-18.0	2	2	5
Michigan -----	1 354 198	1 839	1 293 926	177	60 272	1 189 586	13.8	1	1	3
Minnesota -----	815 925	1 208	788 754	167	27 171	697 994	16.9	2	2	6
Mississippi -----	191 737	332	154 194	131	37 543	160 156	19.7	4	5	4
Missouri -----	696 228	890	621 335	158	74 893	710 370	-2.0	2	2	5
Montana -----	82 571	217	76 990	24	5 582	46 841	76.3	6	7	2
Nebraska -----	189 722	396	178 849	47	10 873	178 645	6.2	3	3	4
Nevada -----	347 333	305	310 125	89	37 207	248 587	39.7	2	2	3
New Hampshire -----	127 771	336	100 870	188	26 901	185 816	-31.2	5	6	7
New Jersey -----	1 462 758	2 308	1 348 407	266	114 351	1 509 798	-3.1	1	1	4
New Mexico -----	277 123	518	260 502	66	16 621	195 795	41.5	3	3	3
New York -----	3 516 647	3 888	3 352 590	333	164 056	3 838 810	-8.4	1	1	3
North Carolina -----	983 367	1 858	870 591	204	112 776	848 401	15.9	2	2	4
North Dakota -----	89 077	202	70 355	40	18 722	61 365	45.2	9	9	24
Ohio -----	1 525 504	1 918	1 412 514	350	112 990	1 181 150	29.2	1	1	4
Oklahoma -----	295 104	578	277 513	97	17 591	256 537	15.0	3	3	5
Oregon -----	509 327	637	458 177	98	51 149	294 254	73.1	2	2	3
Pennsylvania -----	1 869 914	2 269	1 708 498	449	161 415	1 451 246	28.8	1	1	3
Rhode Island -----	124 508	330	101 089	101	23 420	125 658	-9	4	4	13
South Carolina -----	444 595	666	383 378	240	61 216	437 970	1.5	2	2	5
South Dakota -----	87 042	166	76 587	97	10 455	51 614	68.6	9	10	12
Tennessee -----	637 279	779	585 706	193	51 573	550 887	15.7	2	2	7
Texas -----	2 495 988	2 891	2 345 969	207	150 019	1 933 371	29.1	1	1	3
Utah -----	218 455	352	210 052	32	8 403	171 571	27.3	4	4	17
Vermont -----	58 889	202	51 623	72	7 267	80 999	-27.3	5	5	13
Virginia -----	927 690	1 411	758 952	429	168 738	1 000 649	-7.3	1	2	2
Washington -----	1 141 787	1 201	1 046 200	154	95 587	644 722	77.1	1	2	2
West Virginia -----	167 333	261	123 825	114	43 507	127 264	31.5	4	6	6
Wisconsin -----	861 875	1 068	806 972	187	54 903	480 774	79.3	1	1	4
Wyoming -----	86 563	168	78 844	34	7 719	68 893	25.6	5	6	4

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business -----	40 727 041	36 275 257	(Z)	(Z)
SPECIAL TRADE CONTRACTORS				
Electric power installation and service contractor, including lighting -----	27 848 974	26 602 277	(Z)	1
Electronic control systems installation and service contractor -----	2 368 554	1 673 570	1	1
Fire and security systems installation and service contractor -----	2 603 442	1 959 773	2	1
Highway lighting and signal installation and service contractor -----	1 297 020	849 995	2	2
Telecommunications installation and service contractor -----	4 536 809	3 860 192	1	1
Other construction activities -----	815 491	584 559	3	(NA)
OTHER BUSINESS ACTIVITIES				
Retail trade -----	167 519	159 116	7	3
Wholesale trade -----	67 774	58 992	3	4
Other business activities -----	216 863	216 479	3	(NA)
Kind of business activity, n.s.k. -----	804 594	310 304	2	6

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	9.0	10.3	(Z)
Number of construction workers	7.0	8.2	(Z)
Number of all other employees	2.0	2.1	1
Payroll, all employees \$1,000 ..	252.2	256.2	(Z)
Payroll, construction workers do ..	185.8	194.6	(Z)
Payroll, other employees do ..	66.4	61.5	(Z)
Dollar value of business done do ..	753.9	733.8	(Z)
Value of construction work do ..	745.2	724.9	(Z)
Cost of materials, components, supplies, and fuels do ..	286.2	268.6	(Z)
Construction work subcontracted to others do ..	31.8	23.9	1
Rental cost for machinery, equipment, and buildings do ..	10.2	8.9	1
Capital expenditures, other than land do ..	9.4	10.0	2
Gross book value of depreciable assets do ..	80.1	67.5	1
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	28.0	24.9	(Z)
Dollar value of business done do ..	83.6	71.2	(Z)
Value added†† do ..	48.3	42.8	(Z)
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	26.5	23.7	(Z)
Value of construction work do ..	106.2	88.3	(Z)
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	33.2	29.4	(Z)
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.338	.353	(Z)
Cost of materials, components, supplies, and fuels do ..	.384	.371	(Z)
Cost of construction work subcontracted out to others do ..	.043	.033	1
Value of construction work subcontracted in from others do ..	.557	.448	1
Rental cost for machinery, equipment, and buildings do ..	.014	.012	1

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	9.0	28.0	106.2	.338	.384	.043	.557	.014
Alabama -----	10.3	21.0	85.9	.305	.389	*.075	.561	.009
Alaska -----	7.4	38.6	155.3	.322	.362	.054	.848	.021
Arizona -----	9.3	21.2	91.0	.299	.467	.044	.664	.013
Arkansas -----	8.2	20.2	81.8	.312	.434	.025	.641	.013
California -----	8.3	31.1	127.1	.324	.388	.053	.629	.019
Colorado -----	10.2	26.0	98.5	.330	.422	.034	.646	.013
Connecticut -----	6.0	31.8	124.7	.335	.402	.033	.477	.012
Delaware -----	8.6	27.9	100.9	.360	.375	.037	.522	.013
District of Columbia -----	11.7	30.8	126.0	.339	.360	.013	.501	.008
Florida -----	8.8	21.8	88.0	.316	.427	.038	.625	.015
Georgia -----	9.9	24.3	90.8	.343	.404	.040	.567	.016
Hawaii -----	11.4	31.8	138.0	.301	.366	.043	.787	.020
Idaho -----	6.0	25.6	103.2	.313	.415	.023	.728	.015
Illinois -----	10.1	35.8	126.9	.362	.353	.050	.603	.013
Indiana -----	11.1	27.3	98.1	.355	.385	.046	.453	.010
Iowa -----	8.6	25.9	101.6	.331	.380	.026	.465	.012
Kansas -----	8.3	25.2	99.0	.325	.434	.047	.547	.011
Kentucky -----	10.6	24.3	88.5	.343	.413	.034	.605	.012
Louisiana -----	12.3	23.9	84.4	.357	.402	.027	.565	.011
Maine -----	4.2	22.9	95.5	.310	.442	.030	.426	.008
Maryland -----	10.5	26.8	100.6	.346	.408	.025	.637	.013
Massachusetts -----	7.2	31.1	121.4	.335	.371	.045	.612	.012
Michigan -----	8.9	30.9	110.9	.367	.343	.043	.563	.014
Minnesota -----	8.1	31.6	108.4	.373	.393	.033	.510	.013
Mississippi -----	7.6	19.5	79.4	.312	.366	.044	.393	.015
Missouri -----	9.8	28.2	104.7	.351	.368	.042	.617	.009
Montana -----	5.3	24.8	98.3	.335	.448	.035	.592	.010
Nebraska -----	6.5	24.0	98.6	.316	.453	.026	.576	.009
Nevada -----	11.6	27.3	112.8	.310	.357	.101	.876	.016
New Hampshire -----	4.4	24.9	101.2	.325	.440	.018	.533	.015
New Jersey -----	6.7	34.4	122.7	.363	.350	.040	.455	.013
New Mexico -----	7.7	22.5	97.7	.294	.368	.077	.539	.012
New York -----	9.2	34.6	122.7	.361	.344	.045	.459	.013
North Carolina -----	8.2	20.6	77.7	.331	.423	.045	.476	.011
North Dakota -----	5.3	21.9	103.8	.271	.438	.040	.198	.016
Ohio -----	9.8	29.0	104.9	.357	.376	.056	.516	.011
Oklahoma -----	7.7	23.0	89.9	.328	.411	.037	.489	.014
Oregon -----	8.9	32.5	121.4	.354	.372	.031	.585	.015
Pennsylvania -----	9.1	29.8	114.5	.339	.372	.032	.430	.011
Rhode Island -----	4.1	28.0	115.3	.332	.433	.025	.434	.008
South Carolina -----	11.5	23.2	75.9	.368	.372	.034	.583	.017
South Dakota -----	6.7	20.5	92.0	.284	.394	*.075	.472	.015
Tennessee -----	12.4	24.4	92.2	.340	.411	.033	.533	.011
Texas -----	11.6	23.9	105.5	.291	.356	.041	.531	.013
Utah -----	9.3	26.0	103.9	.316	.386	.035	.678	.014
Vermont -----	4.4	22.1	83.9	.342	.407	.027	.273	.011
Virginia -----	9.5	24.6	90.0	.345	.425	.041	.612	.014
Washington -----	10.7	30.7	109.2	.356	.417	.040	.648	.015
West Virginia -----	8.2	25.9	81.9	.382	.359	.014	.462	(S)
Wisconsin -----	9.3	30.1	104.9	.358	.396	(S)	.406	.010
Wyoming -----	6.9	25.1	95.3	.341	.411	.035	.473	.018

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

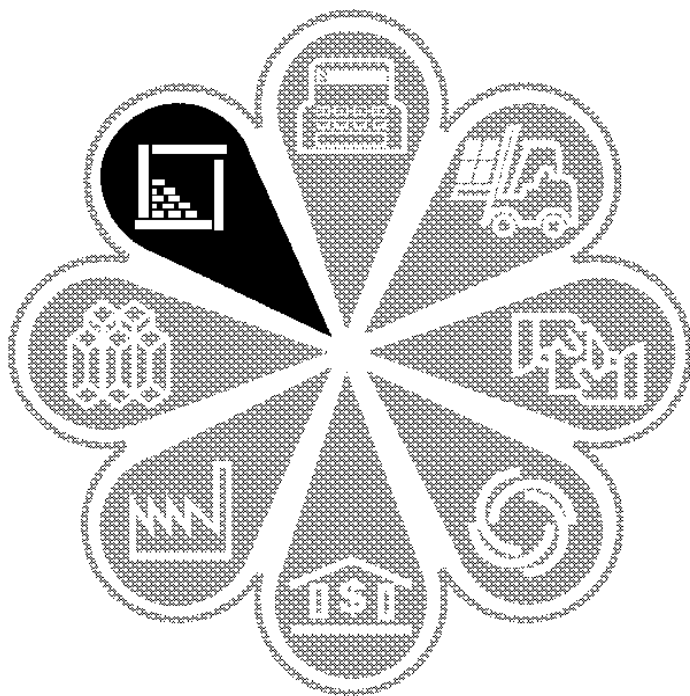
Census of Construction Industries

CC92-I-13

INDUSTRY SERIES

Masonry, Stone Setting, and Other Stone Work Special Trade Contractors

Industry 1741



1992

Census of

Construction Industries

CC92-I-13

INDUSTRY SERIES

Masonry, Stone Setting, and Other Stone Work Special Trade Contractors

Industry 1741

Issued October 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



**Economics and Statistics
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Everett M. Ehrlich, Under Secretary
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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records, however, resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

Contents

Masonry, Stone Setting, and Other Stone Work Special Trade Contractors

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appears as part of the number of each page]

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Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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Summary of Findings

Establishments classified in this industry are primarily engaged in brick and block masonry work, stone setting, and other stonework. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$8.50 billion in total dollar value of business. Of this amount, \$8.46 billion were for the value of construction work. These establishments paid out \$2.70 billion for materials, components, and supplies and \$502 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$154 million. Value added for 1992 was \$5.15 billion.

There were 22,637 establishments with total employment averaging 147,892 during the year. Total payroll for 1992 was \$2.88 billion.

Larger establishments with 20 employees or more, while representing only 6 percent of the total number of employer establishments in this industry accounted for 46 percent of all business done.

A “construction establishment” is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

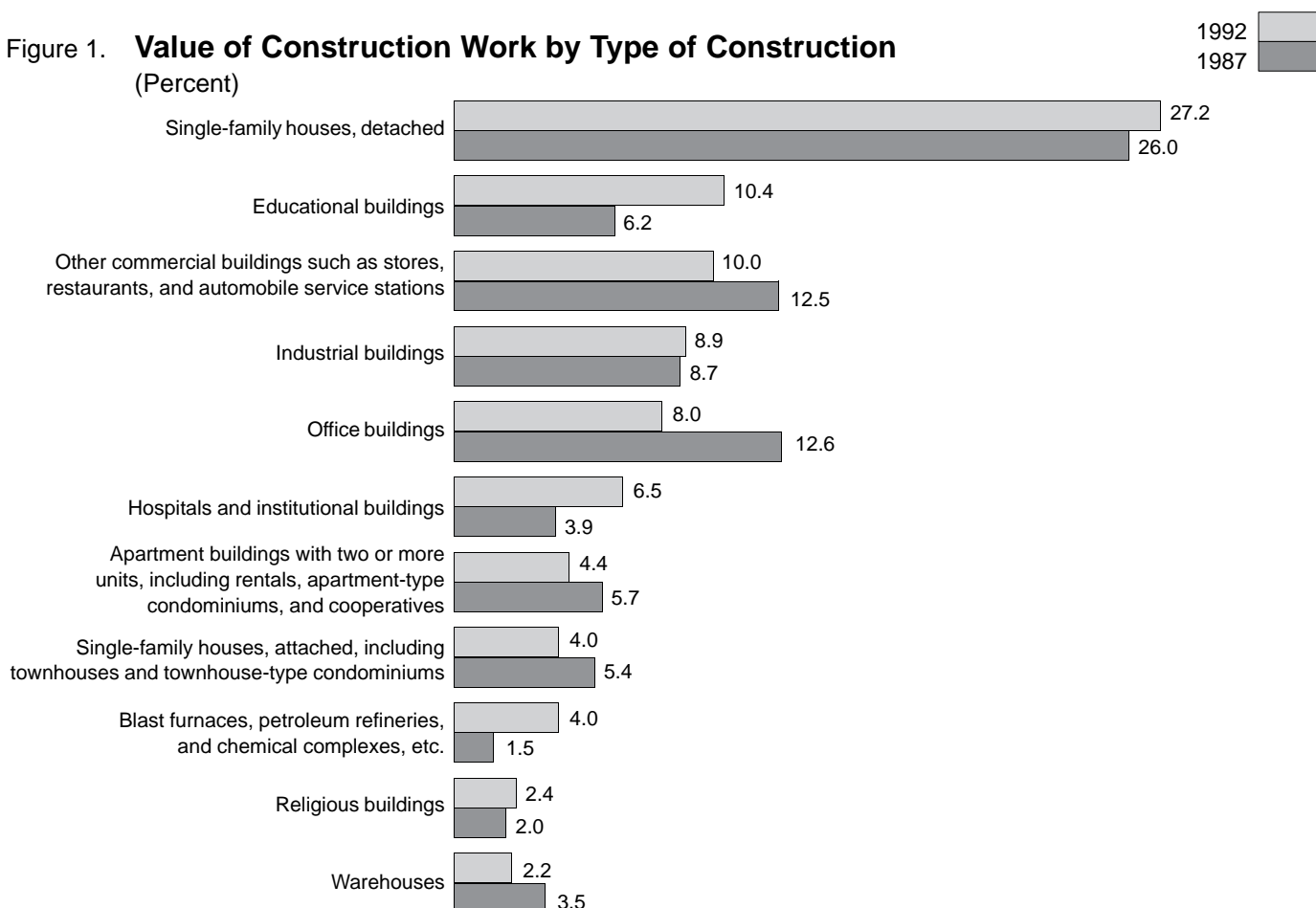


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

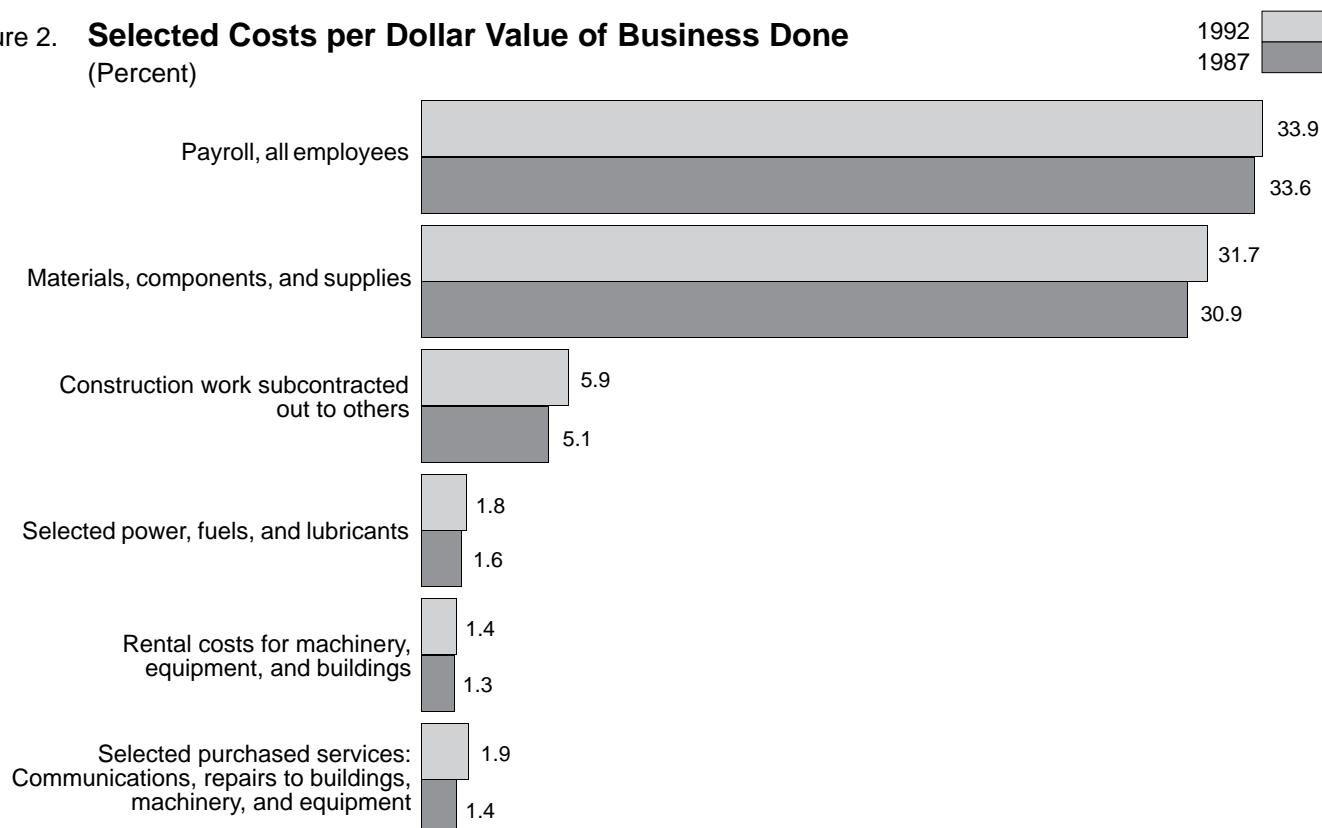


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	22 637	147 892	129 762	2 882 520	2 366 390	8 457 864	7 955 909	5 146 139	2 851 160
Alabama -----	300	2 941	2 644	39 252	32 842	122 657	(D)	75 355	(D)
Alaska -----	19	(D)	47	1 065	(D)	6 338	6 130	2 901	3 412
Arizona -----	342	2 779	2 498	49 455	42 157	151 336	(D)	87 748	59 818
Arkansas -----	194	1 103	1 017	16 094	13 702	46 369	45 108	28 757	16 421
California -----	1 629	10 346	8 832	213 457	169 362	715 033	673 816	436 920	240 717
Colorado -----	306	2 475	2 165	50 857	41 994	145 995	142 615	88 554	54 276
Connecticut -----	369	1 879	1 607	48 780	38 564	140 726	131 984	89 230	(D)
Delaware -----	137	892	770	17 354	14 474	50 454	48 744	30 750	17 998
District of Columbia -----	8	58	46	*1 605	*1 268	3 313	3 199	*2 467	731
Florida -----	1 047	7 217	6 457	117 911	96 904	347 108	(D)	214 528	(D)
Georgia -----	461	3 317	3 051	51 414	44 132	149 427	131 894	82 341	49 595
Hawaii -----	72	639	561	17 260	(D)	63 831	62 316	42 491	19 902
Idaho -----	106	(D)	448	9 863	(D)	29 782	29 233	15 776	13 457
Illinois -----	1 092	8 125	7 084	215 899	174 700	569 691	548 952	362 927	(D)
Indiana -----	633	4 048	3 553	82 073	68 944	209 577	202 710	144 979	58 834
Iowa -----	254	1 734	1 540	35 526	30 402	97 531	96 018	59 290	37 110
Kansas -----	192	1 155	1 059	21 551	18 424	56 431	(D)	35 710	(D)
Kentucky -----	361	2 550	2 309	44 630	39 327	119 650	115 083	76 787	38 320
Louisiana -----	160	(D)	1 333	32 264	(D)	(D)	(D)	56 211	(D)
Maine -----	154	557	477	9 723	(D)	(D)	30 441	21 488	8 991
Maryland -----	643	6 009	5 171	108 898	83 662	271 407	261 622	161 492	(D)
Massachusetts -----	539	2 673	2 253	60 836	47 781	193 731	181 082	124 486	57 245
Michigan -----	882	4 818	4 302	107 334	90 444	338 039	320 493	207 187	115 848
Minnesota -----	513	3 264	2 830	73 544	61 237	228 128	213 217	127 280	86 097
Mississippi -----	147	600	560	6 743	6 037	(D)	15 146	(D)	4 337
Missouri -----	540	4 311	3 836	81 122	67 572	202 474	194 512	134 687	60 111
Montana -----	59	312	278	4 784	(D)	17 932	(D)	(D)	6 688
Nebraska -----	166	974	880	16 571	14 288	49 744	42 074	30 549	14 857
Nevada -----	109	1 465	1 263	27 121	22 753	(D)	(D)	(D)	36 174
New Hampshire -----	79	259	224	5 200	4 378	16 384	15 839	9 854	6 021
New Jersey -----	903	4 432	3 710	99 212	76 453	334 767	302 850	198 229	(D)
New Mexico -----	108	761	692	9 976	(D)	(D)	32 959	20 541	(D)
New York -----	1 435	7 934	6 697	192 976	150 563	601 515	528 536	356 334	176 136
North Carolina -----	1 130	6 575	5 893	90 595	77 610	232 548	218 170	148 398	(D)
North Dakota -----	60	259	242	4 322	4 045	(D)	13 675	(D)	5 670
Ohio -----	1 180	6 622	5 840	133 448	112 484	392 817	372 432	247 483	126 348
Oklahoma -----	142	1 492	1 361	33 753	29 406	90 123	(D)	53 499	(D)
Oregon -----	248	1 161	994	25 511	20 500	76 120	73 418	41 462	32 125
Pennsylvania -----	1 483	9 597	8 392	206 685	168 327	587 140	554 366	373 679	182 946
Rhode Island -----	102	(D)	(S)	(S)	(S)	(D)	(D)	(S)	(D)
South Carolina -----	447	2 657	2 429	31 177	27 356	80 939	(D)	51 449	(D)
South Dakota -----	68	489	437	7 736	6 945	(D)	24 655	14 542	10 138
Tennessee -----	468	3 219	2 899	51 590	42 496	130 477	(D)	79 465	44 313
Texas -----	891	8 438	7 292	137 413	112 214	443 457	399 280	235 541	166 133
Utah -----	210	1 134	1 013	20 491	18 081	(D)	(D)	40 054	(D)
Vermont -----	95	296	261	5 920	5 042	17 465	17 050	11 708	5 342
Virginia -----	986	7 175	6 398	112 856	93 957	304 464	(D)	168 608	(D)
Washington -----	408	2 107	1 791	46 082	37 621	146 606	142 078	86 658	55 937
West Virginia -----	177	(D)	584	6 963	6 435	(D)	(D)	18 234	9 773
Wisconsin -----	531	3 471	3 003	80 216	68 190	246 941	237 964	149 591	90 260
Wyoming -----	50	228	198	3 169	2 745	11 621	11 263	8 060	3 203

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
501 955	6 012 068	120 700	135 397	1 172 557	168 978	8 714 161	5 475 753	1	1	3	U.S.
(D)	88 114	1 314	(D)	12 251	3 422	103 130	58 742	4	(D)	(D)	AL
208	5 776	(S)	88	1 137	(S)	(S)	(S)	(D)	21	21	AK
(D)	115 001	1 642	(S)	15 767	3 921	191 993	113 906	5	(D)	(S)	AZ
*1 261	43 752	316	2 545	13 812	870	28 141	20 176	8	9	35	AR
41 216	523 254	(S)	8 189	74 803	12 609	870 706	501 296	3	2	13	CA
3 381	157 990	3 500	6 442	26 514	2 005	99 086	63 318	4	5	21	CO
8 742	90 651	2 339	(D)	15 024	2 708	163 769	106 084	8	6	(D)	CT
1 710	29 034	586	*815	8 256	1 202	61 745	37 803	10	10	40	DE
*114	3 209	36	119	451	96	5 459	3 348	37	34	25	DC
(D)	257 635	5 195	5 160	39 028	9 332	374 331	226 009	4	(D)	14	FL
17 533	112 355	2 472	2 631	14 255	4 081	122 890	81 550	6	8	30	GA
1 516	60 305	755	1 003	8 281	581	40 626	28 160	8	9	20	HI
550	26 716	351	(D)	4 841	247	11 543	5 612	(D)	12	(D)	ID
20 739	389 881	8 023	8 414	76 348	7 644	483 462	313 376	3	3	13	IL
6 866	131 172	1 761	4 351	32 487	3 083	174 933	121 124	5	4	13	IN
1 512	85 794	865	2 561	27 298	1 203	54 740	35 000	6	6	20	IA
(D)	39 432	557	864	6 542	1 255	57 336	39 077	7	(D)	36	KS
4 567	90 156	2 345	2 193	12 221	2 094	75 140	48 133	5	4	29	KY
(S)	43 293	1 634	931	14 216	1 995	93 980	56 548	(D)	(D)	32	LA
(D)	15 384	515	*857	12 076	1 103	48 684	34 530	14	14	46	ME
9 784	224 851	3 997	5 112	53 155	8 825	409 134	269 277	4	3	19	MD
12 649	115 030	3 105	2 232	33 100	4 968	298 477	201 844	9	4	19	MA
17 546	231 904	4 369	5 478	59 742	4 290	265 692	177 002	4	5	13	MI
14 911	193 705	2 099	4 096	32 670	2 793	183 320	108 529	6	5	18	MN
(D)	10 630	118	130	1 446	877	22 666	13 031	11	10	18	MS
7 962	139 522	1 997	1 650	25 775	4 886	220 327	149 744	4	3	17	MO
(D)	16 383	105	(D)	(S)	191	9 622	5 538	16	(D)	(D)	MT
*7 670	32 232	493	752	5 997	901	28 991	18 807	9	7	14	NE
(D)	(S)	(S)	(D)	8 749	865	57 428	32 621	5	(D)	(D)	NV
545	12 983	234	*152	3 572	1 015	50 120	32 393	11	8	44	NH
31 916	228 913	5 111	2 327	48 962	7 618	554 816	328 876	5	4	25	NJ
(D)	23 661	465	(D)	4 071	728	30 776	18 718	15	13	(D)	NM
72 979	317 368	9 006	9 034	83 208	11 026	722 348	472 945	4	3	13	NY
14 378	207 627	2 510	(D)	30 327	7 242	229 150	154 956	5	5	(D)	NC
(D)	10 974	87	(D)	1 476	268	12 338	6 882	17	13	(D)	ND
20 385	259 509	4 534	4 998	56 676	7 347	383 660	236 160	4	5	13	OH
(D)	38 364	(S)	2 461	7 732	515	19 320	12 162	2	(D)	8	OK
2 702	57 226	1 474	761	8 751	663	40 335	25 279	7	6	31	OR
32 774	388 969	8 414	7 178	80 780	11 105	640 805	403 016	3	2	15	PA
(S)	(S)	(S)	324	3 775	1 068	79 431	52 490	(D)	(D)	33	RI
(D)	(S)	1 208	(D)	11 531	3 241	94 081	62 445	6	(D)	(D)	SC
(D)	20 305	356	1 065	2 900	292	9 167	6 668	20	15	34	SD
(D)	98 009	1 722	(S)	17 799	4 794	151 393	95 205	5	(D)	(S)	TN
44 177	291 116	4 875	6 580	45 006	9 084	430 236	256 004	4	5	15	TX
(D)	51 248	888	(D)	6 770	955	45 818	28 688	8	(D)	(D)	UT
415	11 915	111	160	3 723	431	22 601	13 982	13	13	35	VT
(D)	232 884	4 069	4 688	45 062	8 902	369 628	240 392	4	(D)	15	VA
4 528	116 796	2 248	4 145	24 456	1 300	95 384	53 232	7	6	27	WA
(D)	26 245	*351	*811	4 053	484	12 511	9 265	(D)	(D)	41	WV
8 977	180 316	3 073	5 319	38 720	2 660	156 069	92 226	5	5	17	WI
358	8 202	108	(D)	*3 303	137	5 124	2 736	12	13	(D)	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	22 637	23 284	20 188	24 815	1	1	1	1
Proprietors and working partners	12 833	9 689	10 954	19 568	1	2	2	2
All employees**	147 892	168 978	120 600	152 167	1	1	1	1
Construction workers:								
March	116 648	133 944	93 633	124 832	1	1	1	1
May	134 105	152 448	111 019	148 859	1	1	1	1
August	138 553	162 914	115 403	154 352	1	1	1	1
November	129 742	152 007	108 733	142 600	1	1	1	1
Average	129 762	150 308	109 576	142 797	1	1	1	1
Other employees:								
March	18 766	18 697	10 940	8 810	1	1	2	1
May	18 376	18 112	(NA)	(NA)	1	1	(NA)	(NA)
August	17 671	19 051	(NA)	(NA)	1	1	(NA)	(NA)
November	17 705	18 792	(NA)	(NA)	1	1	(NA)	(NA)
Average	18 130	18 670	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	2 882 520	2 946 997	1 550 759	1 493 214	1	1	1	1
Payroll, construction workers	2 366 390	2 461 628	1 344 228	1 350 307	1	1	1	1
Payroll, other employees	516 131	485 369	206 530	142 907	1	1	1	1
First-quarter payroll, all employees	609 554	597 856	306 934	285 349	1	1	1	1
Fringe benefits, all employees	746 605	679 235	286 650	279 356	1	1	1	1
Legally required expenditures	536 514	503 394	231 630	173 975	1	1	1	1
Voluntary expenditures	210 090	175 841	55 020	105 381	2	1	1	1
Dollar value of business done	8 499 254	8 778 589	4 332 628	3 805 140	1	1	1	1
Value of construction work	8 457 864	8 714 161	4 269 394	3 775 368	1	1	1	1
Value of construction work subcontracted in from others	6 012 068	5 477 793	2 686 043	2 627 600	1	1	1	1
Other business receipts	41 390	64 428	63 233	29 772	9	5	4	3
Net value of construction work†	7 955 909	8 269 188	4 046 361	3 677 609	1	1	1	1
Value added††	5 146 139	5 475 753	2 667 213	2 416 694	1	1	1	1
Selected costs	3 353 115	3 302 836	1 665 414	1 388 446	1	1	1	1
Materials, components, and supplies	2 697 492	2 715 354	1 353 242	1 219 639	1	1	1	1
Construction work subcontracted out to others	501 955	444 973	223 033	97 760	4	3	3	1
Selected power, fuels, and lubricants	153 668	142 508	89 138	71 048	2	1	2	1
Electricity	16 059	13 033	7 958	6 153	3	2	3	2
Natural and manufactured gas	5 565	3 173	2 407	3 575	5	4	6	2
Gasoline and diesel fuel	121 405	116 154	72 022	54 494	2	1	1	1
On highway use	99 543	100 806	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	21 863	15 348	(NA)	(NA)	4	3	(NA)	(NA)
Other, including lubricating oils and greases	10 638	10 147	6 750	6 826	4	3	4	3
Rental cost for machinery, equipment, and buildings	120 700	116 663	51 370	32 922	2	2	2	1
For machinery and equipment	82 904	88 303	38 067	26 351	3	2	2	1
For buildings	37 796	28 360	13 303	6 571	3	3	3	2
Selected purchased services	161 874	119 315	69 479	72 596	2	2	1	6
Communication services	50 483	34 524	21 401	24 836	3	2	2	15
Repairs to buildings and other structures	7 817	5 589	4 171	2 969	5	6	3	5
Repairs to machinery and equipment	103 574	79 200	43 907	44 791	3	2	2	6
Ownership of construction projects:								
Value of construction work	8 457 864	8 714 161	4 269 394	3 775 368	1	1	1	1
Government owned	1 765 139	1 194 727	524 282	499 223	2	3	5	1
Federal	389 477	308 449	(NA)	(NA)	5	5	(NA)	(NA)
State and local	1 375 662	886 278	(NA)	(NA)	2	3	(NA)	(NA)
Privately owned	6 692 726	7 519 433	3 745 112	3 276 146	1	1	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 089 192	801 900	2	2
Capital expenditures, other than land -----	135 397	157 073	3	3
New -----	101 002	119 327	4	3
Used -----	34 394	37 746	6	5
Retirements and disposition of depreciable assets -----	52 031	34 793	13	6
End-of-year gross book value of depreciable assets -----	1 172 557	924 180	2	2
Depreciation charges during year -----	136 516	120 744	3	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	148 047	141 265	5	5
Capital expenditures, other than land -----	12 283	16 014	8	8
New buildings and other structures -----	8 441	7 914	10	8
Used buildings and other structures -----	3 842	8 099	15	14
Retirements and disposition of depreciable assets -----	3 168	2 819	23	34
End-of-year gross book value of depreciable assets -----	157 161	154 459	5	5
Depreciation charges during year -----	12 970	11 806	6	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	941 145	660 635	2	2
Capital expenditures, other than land -----	123 114	141 059	4	3
New machinery and equipment, including automobiles and trucks -----	92 561	111 412	4	3
New automobiles and trucks, intended primarily for highway use -----	37 435	61 622	6	4
Used machinery and equipment, including automobiles and trucks -----	30 553	29 646	6	5
Retirements and disposition of depreciable assets -----	48 863	31 973	13	6
End-of-year gross book value of depreciable assets -----	1 015 396	769 720	2	2
Depreciation charges during year -----	123 546	108 938	3	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	22 637	1
Value of construction work	8 457 864	1
Establishments with inventories:		
Number	2 795	3
Value of construction work	2 293 812	1
Inventories ¹ :		
End of 1992, materials and supplies	51 776	5
End of 1991, materials and supplies	50 325	5
Establishments with no inventories:		
Number	10 992	1
Value of construction work	3 834 766	1
Establishments not reporting:		
Number	8 850	1
Value of construction work	2 329 286	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	22 637	14 323	5 011	1 983	1 005	216	83	11	4	(S)
All employees** -----	147 892	27 895	31 265	26 494	29 207	14 034	11 348	3 561	4 088	(D)
Payroll, all employees -----	2 882 520	385 035	497 978	541 225	701 264	367 167	257 584	73 221	59 046	(D)
Dollar value of business done -----	8 499 254	1 636 415	1 450 010	1 539 318	1 866 618	977 319	679 547	179 968	170 059	(D)
Value of construction work -----	8 457 864	1 631 193	1 444 782	1 528 201	1 852 137	974 602	677 857	179 613	169 479	(D)
Net value of construction work† -----	7 955 909	1 514 263	1 367 179	1 414 519	1 750 538	925 877	647 479	<u>336 055</u>	(D)	(D)
Value added†† -----	5 146 139	955 346	882 055	910 425	1 137 685	612 428	416 957	109 527	<u>121 717</u>	(D)
Cost of materials, components, supplies, and fuels -----	2 851 160	564 139	490 351	515 211	627 335	316 166	232 212	<u>105 746</u>	(D)	(D)
Cost of construction work subcontracted out to others -----	501 955	116 930	77 604	113 683	101 598	48 726	30 378	<u>13 037</u>	(D)	(D)
Rental cost for machinery, equipment, and buildings -----	120 700	16 869	15 796	22 574	30 453	15 843	11 045	<u>8 121</u>	(D)	(D)
Capital expenditures, other than land -----	135 397	30 238	22 204	29 199	30 053	14 200	5 886	<u>3 617</u>	(D)	(D)
End-of-year gross book value of depreciable assets -----	1 172 557	239 605	208 207	233 431	255 923	122 851	77 996	23 665	<u>10 879</u>	(D)
1987										
All employees** -----	168 978	28 051	35 095	32 545	33 756	18 196	12 555	6 365	2 411	—
Value of construction work -----	8 714 161	1 306 072	1 595 457	1 630 143	1 904 217	1 087 248	725 021	<u>466 001</u>	(D)	—
Value added†† -----	5 475 753	800 696	1 012 451	1 019 427	1 214 306	701 739	440 109	220 120	66 903	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	2	3	3	2	1	2	(Z)	(Z)	(D)
Net value of construction work† -----	1	3	3	3	2	1	1	(Z)	(D)	(D)
Capital expenditures, other than land -----	3	8	9	9	4	1	(Z)	(Z)	(D)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	22 637	(S)	(S)	4 638	7 452	3 113	1 545	1 221	343	130	48
All employees** -----	147 892	(S)	(S)	10 435	28 653	20 612	18 632	26 797	16 186	10 484	11 235
Payroll, all employees -----	2 882 520	(S)	(S)	103 618	379 802	359 388	378 557	634 781	422 743	306 243	263 791
Dollar value of business done -----	8 499 254	(S)	(S)	337 878	1 163 876	1 058 222	1 077 446	1 825 696	1 194 575	894 568	832 194
Value of construction work -----	8 457 864	(S)	(S)	337 318	1 161 118	1 056 063	1 072 252	1 812 548	1 184 797	889 090	830 068
Net value of construction work† -----	7 955 909	(S)	(S)	326 331	1 115 032	1 007 836	1 011 676	1 699 103	1 116 841	807 915	761 243
Value added†† -----	5 146 139	(S)	(S)	218 376	738 082	648 009	640 929	1 073 879	719 287	536 873	496 946
Cost of materials, components, supplies, and fuels -----	2 851 160	(S)	(S)	108 516	379 708	361 986	375 941	638 372	407 331	276 521	266 423
Cost of construction work subcontracted out to others -----	501 955	(S)	(S)	10 987	46 086	48 227	60 575	113 445	67 957	81 175	68 825
Rental cost for machinery, equipment, and buildings -----	120 700	(S)	(S)	2 683	13 819	12 749	13 348	29 665	18 190	12 923	16 663
Capital expenditures, other than land -----	135 397	(S)	(S)	6 505	27 242	19 313	15 920	29 705	18 215	10 190	6 972
End-of-year gross book value of depreciable assets -----	1 172 557	(S)	(S)	52 826	193 739	150 985	157 354	263 973	157 008	95 805	79 787
1987											
All employees** -----	168 978	(S)	(S)	13 367	30 594	23 067	22 464	28 719	20 116	12 082	11 900
Value of construction work -----	8 714 161	(S)	(S)	361 117	1 110 179	1 067 988	1 200 442	1 788 101	1 319 029	892 784	843 482
Value added†† -----	5 475 753	(S)	(S)	243 354	721 356	674 379	718 990	1 126 584	842 515	553 690	506 540
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	4	3	4	4	2	1	(Z)	(Z)
Net value of construction work† -----	1	(S)	(S)	3	3	4	4	3	2	1	(Z)
Capital expenditures, other than land -----	3	(S)	(S)	13	8	11	12	7	2	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	8 457 864	5 709 991	1 298 228	1 131 934	1	1	2	2
Building construction	7 477 746	5 452 653	1 199 462	825 631	1	1	2	3
Single-family houses	2 639 186	2 119 276	327 232	192 678	2	2	4	5
Single-family houses, detached	2 296 912	1 834 495	292 715	169 702	2	2	4	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	342 274	284 781	34 517	22 976	5	5	11	11
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	371 947	188 757	74 984	108 206	6	6	2	17
Other residential buildings, including hotels, motels, and tourist cabins	131 370	105 408	11 910	14 052	6	7	20	5
Office buildings	674 625	472 190	116 647	85 789	2	2	8	5
Other commercial buildings such as stores, restaurants, and automobile service stations	845 421	651 011	128 188	66 222	3	3	4	6
Industrial buildings and warehouses	939 288	585 196	148 709	205 383	2	2	6	3
Industrial buildings	756 976	438 430	127 035	191 511	2	3	6	3
Warehouses	182 312	146 766	21 675	13 872	4	4	7	9
Religious buildings	199 833	103 654	60 275	35 904	4	3	9	5
Educational buildings	883 401	642 519	185 439	55 443	2	2	4	5
Hospitals and institutional buildings	549 060	394 522	118 819	35 718	2	2	5	5
Amusement, social, and recreational buildings, indoors	85 062	68 004	9 571	7 487	5	6	7	8
Other nonresidential buildings	158 553	122 116	17 688	18 749	4	5	8	6
Nonbuilding construction	662 408	257 338	98 766	306 303	3	6	9	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	88 299	64 665	11 737	11 897	10	13	11	8
Blast furnaces, petroleum refineries, chemical complexes, etc.	340 174	85 303	38 715	216 156	3	11	3	2
Power plants	76 433	14 007	7 931	54 494	5	10	2	6
Other nonbuilding construction	157 502	93 363	40 382	23 756	8	9	22	7
Construction work, n.s.k.	317 710	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
1987								
Value of construction work	8 714 161	6 471 704	1 174 307	813 761	1	1	3	2
Building construction	8 081 409	6 301 397	1 129 342	650 669	1	1	3	2
Single-family houses	2 738 184	2 276 294	295 576	166 314	2	2	4	5
Single-family houses, detached	2 267 304	1 868 222	260 474	138 608	2	2	4	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	470 880	408 072	35 102	27 706	4	5	9	8
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	499 486	405 449	57 086	36 949	2	2	8	6
Other residential buildings, including hotels, motels, and tourist cabins	314 584	235 417	45 764	33 402	4	4	11	7
Office buildings	1 100 895	894 343	142 764	63 787	1	1	8	4
Other commercial buildings such as stores, restaurants, and automobile service stations	1 089 345	873 059	154 035	62 250	2	2	4	6
Industrial buildings and warehouses	1 063 764	765 231	132 866	165 666	2	2	4	4
Industrial buildings	757 114	507 539	97 927	151 647	2	2	5	4
Warehouses	306 650	257 692	34 939	14 019	3	3	6	9
Religious buildings	178 526	94 685	51 346	32 494	3	4	7	7
Educational buildings	540 660	371 822	130 628	38 209	3	3	6	6
Hospitals and institutional buildings	340 159	230 854	75 730	33 575	3	3	6	9
Amusement, social, and recreational buildings, indoors	86 755	59 590	*23 309	3 854	17	10	56	28
Other nonresidential buildings	129 051	94 653	20 238	14 169	4	3	16	12
Nonbuilding construction	378 364	170 307	44 964	163 092	4	6	7	4
Blast furnaces, petroleum refineries, chemical complexes, etc.	128 396	26 435	8 091	93 869	4	8	28	4
Power plants	59 390	6 677	8 202	44 510	6	3	11	7
Other nonbuilding construction	190 578	137 194	28 671	24 713	14	18	12	14
Construction work, n.s.k.	254 388	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments -----	22 637	147 892	2 882 520	8 457 864	5 181 401	7 955 909	5 146 139	501 955	1	1	4
Establishments not specializing by type -----	3 214	39 232	895 520	2 429 489	(NA)	2 292 957	1 491 319	136 533	2	2	9
Establishments specializing 51 percent or more -----	19 423	108 659	1 987 000	6 028 375	5 181 401	5 662 952	3 654 819	365 423	1	1	4
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	12 321	46 208	709 616	2 242 829	2 035 609	2 122 102	1 361 987	120 727	2	2	6
Establishments with —											
100 percent specialization -----	7 627	24 843	348 057	1 122 005	1 122 005	1 059 325	679 930	62 680	3	3	10
90 to 99 percent specialization -----	2 044	9 366	154 814	454 931	425 181	437 951	287 034	16 980	5	5	11
80 to 89 percent specialization -----	1 049	4 891	82 049	259 471	212 659	241 860	148 846	(S)	8	9	(S)
70 to 79 percent specialization -----	981	4 361	73 093	251 417	182 514	237 085	152 222	14 332	8	9	16
60 to 69 percent specialization -----	475	2 037	36 330	110 724	68 414	105 055	66 078	5 669	10	8	19
51 to 59 percent specialization -----	145	710	15 273	44 281	24 835	40 826	27 877	3 454	12	10	16
OFFICE BUILDINGS											
All establishments specializing in type -----	403	5 237	133 510	383 534	303 981	348 567	214 394	34 967	5	4	6
Establishments with —											
100 percent specialization -----	154	1 260	30 734	81 577	81 577	77 821	53 089	3 756	12	10	12
90 to 99 percent specialization -----	48	470	10 640	57 894	53 843	39 537	15 346	18 356	26	10	10
80 to 89 percent specialization -----	47	861	21 700	57 481	47 403	54 641	31 722	2 840	9	4	2
70 to 79 percent specialization -----	54	690	14 459	39 897	29 625	(D)	23 666	(D)	17	11	(D)
60 to 69 percent specialization -----	76	1 769	49 077	132 013	83 461	124 567	80 358	7 446	8	6	11
51 to 59 percent specialization -----	23	187	6 900	14 672	8 072	(D)	10 214	(D)	21	12	(D)
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	1 022	8 652	166 047	505 643	408 219	484 352	297 574	21 291	5	5	14
Establishments with —											
100 percent specialization -----	397	2 584	46 617	144 473	144 473	137 765	86 354	6 708	10	9	21
90 to 99 percent specialization -----	151	1 183	20 394	58 682	54 649	56 138	35 819	2 544	16	13	10
80 to 89 percent specialization -----	(S)	1 268	23 056	71 648	59 046	69 542	42 101	(S)	14	12	(S)
70 to 79 percent specialization -----	141	1 397	26 865	91 024	65 558	85 499	52 038	5 525	13	13	36
60 to 69 percent specialization -----	138	1 574	35 226	98 122	61 279	96 854	60 237	1 269	8	8	20
51 to 59 percent specialization -----	56	647	13 888	41 694	23 214	38 555	21 025	*3 139	15	16	50
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	619	10 177	180 006	517 544	429 135	499 115	347 109	18 429	3	3	15
Establishments with —											
100 percent specialization -----	302	(S)	(S)	(S)	(S)	(S)	(S)	9 901	(S)	(S)	26
90 to 99 percent specialization -----	59	706	12 920	30 129	28 113	28 607	20 456	*1 522	25	18	58
80 to 89 percent specialization -----	23	900	15 220	34 660	28 604	32 927	23 606	1 732	16	12	6
70 to 79 percent specialization -----	118	1 062	25 279	63 907	46 287	61 152	42 300	2 755	11	11	15
60 to 69 percent specialization -----	84	879	20 099	52 484	33 432	50 960	33 611	1 523	11	7	12
51 to 59 percent specialization -----	(S)	2 687	37 247	93 874	50 207	92 879	70 514	995	2	5	8
EDUCATIONAL BUILDINGS											
All establishments specializing in type -----	633	9 421	212 800	553 140	424 621	534 671	340 844	18 469	3	3	9
Establishments with —											
100 percent specialization -----	167	1 275	22 959	53 729	53 729	52 928	36 634	801	10	9	20
90 to 99 percent specialization -----	111	1 564	41 490	118 175	109 007	116 187	67 903	1 987	11	11	25
80 to 89 percent specialization -----	90	1 611	37 419	89 217	72 680	87 523	56 164	1 695	9	7	20
70 to 79 percent specialization -----	95	2 118	41 922	112 726	82 187	108 641	69 687	4 086	7	6	36
60 to 69 percent specialization -----	132	1 896	48 959	122 783	76 410	116 880	73 574	5 903	7	7	9
51 to 59 percent specialization -----	39	956	20 050	56 509	30 607	52 512	36 881	3 998	5	4	2

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	22 637	129 762	116 648	134 105	138 553	129 742	1	1	1	1	1	1
Alabama	300	2 644	2 399	2 667	2 893	2 616	4	4	6	5	4	4
Alaska	19	47	26	60	67	35	(Z)	10	24	10	11	17
Arizona	342	2 498	2 395	2 521	2 536	2 539	6	5	4	6	5	6
Arkansas	194	1 017	962	1 224	991	890	6	9	9	9	10	8
California	1 629	8 832	8 398	9 369	9 252	8 309	2	3	3	3	3	3
Colorado	306	2 165	1 910	2 109	2 428	2 213	5	5	6	5	7	5
Connecticut	369	1 607	1 160	1 740	1 980	1 549	5	8	7	8	11	7
Delaware	137	770	725	789	795	769	5	10	9	9	11	14
District of Columbia	8	46	45	49	50	*41	32	35	36	33	27	40
Florida	1 047	6 457	6 479	6 626	6 376	6 346	4	4	4	4	5	5
Georgia	461	3 051	2 983	3 282	3 234	2 706	5	6	6	9	7	8
Hawaii	72	561	582	518	564	578	11	8	8	10	10	11
Idaho	106	448	392	512	529	357	9	12	13	12	13	19
Illinois	1 092	7 084	5 908	7 683	7 679	7 068	4	3	4	4	3	4
Indiana	633	3 553	2 982	3 699	3 915	3 617	4	5	5	5	5	6
Iowa	254	1 540	1 343	1 383	1 872	1 562	7	6	7	7	7	7
Kansas	192	1 059	1 066	1 101	1 101	967	6	7	7	7	9	10
Kentucky	361	2 309	2 167	2 384	2 409	2 278	3	5	5	4	6	9
Louisiana	160	1 333	1 377	1 243	1 277	1 436	3	6	6	8	7	7
Maine	154	477	359	502	564	481	9	13	15	14	13	14
Maryland	643	5 171	4 709	5 353	5 320	5 301	3	4	4	3	4	5
Massachusetts	539	2 253	1 658	2 316	2 505	2 531	5	10	11	11	10	9
Michigan	882	4 302	3 498	4 450	4 817	4 444	4	4	5	4	4	4
Minnesota	513	2 830	2 221	2 915	3 291	2 894	6	6	6	7	6	5
Mississippi	147	560	605	623	549	463	6	11	14	11	12	13
Missouri	540	3 836	3 663	4 070	3 890	3 720	4	4	4	4	4	4
Montana	59	278	240	259	321	290	10	16	16	13	20	17
Nebraska	166	880	740	904	972	905	7	9	10	9	9	9
Nevada	109	1 263	1 258	1 369	1 256	1 168	12	5	5	4	6	5
New Hampshire	79	224	146	216	239	294	9	12	17	12	8	11
New Jersey	903	3 710	3 000	3 675	4 169	3 998	4	5	6	5	6	5
New Mexico	108	692	633	712	762	660	15	14	10	12	17	18
New York	1 435	6 697	5 219	6 997	7 413	7 157	4	4	3	4	4	5
North Carolina	1 130	5 893	5 888	6 011	6 031	5 644	3	5	5	5	5	5
North Dakota	60	242	148	229	372	217	12	18	11	17	26	11
Ohio	1 180	5 840	4 646	6 202	6 387	6 125	3	4	4	4	4	4
Oklahoma	142	1 361	1 472	1 194	1 235	1 542	5	2	4	3	3	2
Oregon	248	994	1 022	1 067	977	910	7	7	7	7	9	9
Pennsylvania	1 483	8 392	7 031	8 739	9 350	8 447	3	3	3	3	3	3
Rhode Island	102	(S)	(S)	(S)	(S)	(S)	8	(S)	(S)	(S)	(S)	(S)
South Carolina	447	2 429	2 355	2 469	2 466	2 426	3	6	7	7	7	7
South Dakota	68	437	322	402	504	520	12	20	18	18	24	23
Tennessee	468	2 899	2 717	2 861	3 173	2 847	5	5	5	5	5	6
Texas	891	7 292	7 515	7 419	7 384	6 849	3	4	4	5	4	4
Utah	210	1 013	880	1 028	1 093	1 052	7	8	9	10	9	11
Vermont	95	261	167	285	316	277	11	13	17	20	13	18
Virginia	986	6 398	6 179	6 682	6 463	6 269	3	4	5	5	4	4
Washington	408	1 791	1 635	1 837	1 923	1 771	6	7	6	7	8	8
West Virginia	177	584	582	625	565	566	6	12	15	12	12	13
Wisconsin	531	3 003	2 300	3 026	3 350	3 337	5	5	5	5	5	4
Wyoming	50	198	184	176	(S)	213	8	12	14	10	(S)	18

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	8 457 864	22 485	7 747 908	2 348	709 956	8 714 161	-2.9	1	1	2
Alabama -----	93 275	299	80 830	40	12 446	75 753	23.1	4	5	9
Alaska -----	7 252	19	6 317	3	935	1 823	297.8	19	21	(Z)
Arizona -----	154 366	341	148 588	10	5 779	194 664	-20.7	5	6	1
Arkansas -----	47 571	194	41 944	26	5 627	24 818	91.7	7	8	5
California -----	715 482	1 627	693 333	38	22 149	888 958	-19.5	3	3	9
Colorado -----	(D)	306	(D)	6	4 237	94 114	(D)	(D)	(D)	(Z)
Connecticut -----	143 257	369	136 279	36	6 978	173 667	-17.5	6	6	15
Delaware -----	62 330	137	49 453	77	12 877	65 612	-5.0	9	10	21
District of Columbia -----	44 658	7	(S)	137	42 637	37 344	19.6	8	(S)	8
Florida -----	339 279	1 047	311 965	25	27 313	369 119	-8.1	4	5	(Z)
Georgia -----	140 727	461	117 023	55	23 704	162 718	-13.5	10	12	6
Hawaii -----	71 547	72	63 831	*18	7 716	42 330	69.0	8	9	2
Idaho -----	26 970	98	26 205	12	765	12 065	123.5	13	13	26
Illinois -----	591 890	1 092	561 857	74	30 033	506 518	16.9	3	3	2
Indiana -----	222 420	632	204 335	106	18 085	169 503	31.2	4	4	5
Iowa -----	107 399	254	83 697	66	23 703	49 801	115.7	7	7	16
Kansas -----	56 321	184	36 166	58	20 154	50 456	11.6	6	8	8
Kentucky -----	102 910	(S)	91 486	69	11 424	81 998	25.5	5	5	14
Louisiana -----	78 959	160	(S)	21	10 749	68 854	14.7	9	(S)	1
Maine -----	33 401	148	29 404	12	3 997	47 620	-29.9	12	14	9
Maryland -----	246 175	633	221 467	125	24 708	371 289	-33.7	4	4	9
Massachusetts -----	176 220	(S)	168 631	38	7 589	313 887	-43.9	4	4	2
Michigan -----	336 289	874	329 630	47	6 659	272 393	23.5	5	5	5
Minnesota -----	221 150	505	208 157	27	12 992	197 645	11.9	5	5	4
Mississippi -----	19 284	135	13 158	28	6 125	25 832	-25.4	6	9	3
Missouri -----	173 348	539	154 144	73	19 204	207 401	-16.4	4	4	15
Montana -----	(D)	59	(D)	12	4 205	9 818	(D)	(D)	(D)	8
Nebraska -----	52 196	166	46 284	12	5 911	33 674	55.0	10	11	5
Nevada -----	86 316	(S)	75 559	20	10 757	59 316	45.5	6	7	2
New Hampshire -----	19 752	(S)	14 442	55	5 310	54 449	-63.7	8	7	24
New Jersey -----	348 348	894	317 593	71	30 755	590 182	-41.0	4	4	3
New Mexico -----	37 423	108	34 617	9	2 805	35 444	5.6	12	13	13
New York -----	616 331	1 431	592 234	78	24 098	701 828	-12.2	4	4	13
North Carolina -----	270 061	1 122	227 001	113	43 060	247 707	9.0	5	5	5
North Dakota -----	16 791	60	12 895	8	3 896	17 081	-1.7	11	14	7
Ohio -----	386 042	1 169	365 591	89	20 450	380 906	1.3	5	5	9
Oklahoma -----	53 569	139	50 141	22	3 428	32 458	65.0	4	4	9
Oregon -----	74 081	248	68 111	20	5 970	36 949	100.5	6	6	13
Pennsylvania -----	566 977	1 474	518 011	108	48 966	567 477	-1	3	3	1
Rhode Island -----	(D)	102	(D)	24	2 702	39 595	(D)	(D)	(D)	20
South Carolina -----	80 764	430	68 091	88	12 674	85 743	-5.8	7	8	11
South Dakota -----	26 152	68	24 128	17	2 024	9 833	166.0	14	15	7
Tennessee -----	124 429	465	113 020	46	11 409	131 956	-5.7	4	4	10
Texas -----	456 909	891	437 044	23	19 864	400 264	14.2	5	5	7
Utah -----	54 367	207	51 309	12	3 058	42 604	27.6	9	9	37
Vermont -----	16 938	95	15 787	7	1 151	25 713	-34.1	14	15	27
Virginia -----	285 703	982	255 321	143	30 383	421 365	-32.2	5	5	13
Washington -----	154 297	408	140 753	40	13 543	95 050	62.3	6	6	5
West Virginia -----	47 784	169	29 036	59	18 749	33 065	44.5	18	29	8
Wisconsin -----	248 293	529	234 557	34	13 736	146 728	69.2	6	6	2
Wyoming -----	13 351	50	10 884	13	2 467	8 750	52.6	11	14	8

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business -----	8 499 254	8 778 589	1	1
SPECIAL TRADE CONTRACTORS				
Concrete contractor, except paving of roads, highways, and streets ----	95 959	76 666	5	5
Foundation contractor: brick, block, or stone -----	959 165	1 028 713	3	3
Marble contractor, exterior -----	70 938	190 399	6	6
Masonry contractor, brick and block -----	5 676 837	6 290 235	1	1
Masonry: pointing, cleaning or caulking contractor -----	289 291	164 274	5	6
Refractory brick contractor -----	352 283	180 213	3	4
Special cases -----	69 197	(NA)	11	(NA)
Stonework contractor -----	476 699	399 751	4	6
Other construction activities -----	354 724	299 049	4	(NA)
Other business activities -----	39 084	65 094	9	7
Kind of business activity, n.s.k. -----	115 078	84 192	7	10

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	6.5	7.3	1
Number of construction workers	5.7	6.5	1
Number of all other employees .....	.8	.8	1
Payroll, all employees \$1,000 ..	127.3	126.6	1
Payroll, construction workers do ..	104.5	105.7	1
Payroll, other employees do ..	22.8	20.8	1
Dollar value of business done do ..	375.5	377.0	1
Value of construction work do ..	373.6	374.3	1
Cost of materials, components, supplies, and fuels do ..	126.0	122.8	1
Construction work subcontracted to others do ..	22.2	19.1	4
Rental cost for machinery, equipment, and buildings do ..	5.3	5.0	3
Capital expenditures, other than land do ..	6.0	6.7	4
Gross book value of depreciable assets do ..	51.8	39.7	2
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	19.5	17.4	(Z)
Dollar value of business done do ..	57.5	52.0	1
Value added†† do ..	34.8	32.4	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	18.2	16.4	(Z)
Value of construction work do ..	65.2	58.0	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	28.5	26.0	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.341	.338	1
Cost of materials, components, supplies, and fuels do ..	.337	.328	1
Cost of construction work subcontracted out to others do ..	.059	.051	4
Value of construction work subcontracted in from others do ..	.711	.629	2
Rental cost for machinery, equipment, and buildings do ..	.014	.013	2

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	6.5	19.5	65.2	.341	.337	.059	.711	.014
Alabama -----	9.8	13.3	46.4	.320	(D)	(D)	.718	.011
Alaska -----	(D)	(D)	134.9	.168	.538	.033	.911	(S)
Arizona -----	8.1	17.8	60.6	.327	.395	(D)	.760	.011
Arkansas -----	5.7	14.6	45.6	.347	.354	*.027	.944	.007
California -----	6.4	20.6	81.0	.299	.337	.058	.732	(S)
Colorado -----	8.1	20.5	67.4	.348	.372	.023	(S)	.024
Connecticut -----	5.1	26.0	87.6	.347	(D)	.062	.644	.017
Delaware -----	6.5	19.5	65.5	.344	.357	.034	.575	.012
District of Columbia -----	7.0	27.7	72.0	.485	.221	.035	.969	.011
Florida -----	6.9	16.3	53.8	.340	(D)	(D)	.742	.015
Georgia -----	7.2	15.5	49.0	.344	.332	.117	.752	.017
Hawaii -----	8.9	27.0	113.8	.270	.312	.024	.945	.012
Idaho -----	(D)	(D)	66.5	.331	.452	.018	.897	.012
Illinois -----	7.4	26.6	80.4	.379	(D)	.036	.684	.014
Indiana -----	6.4	20.3	59.0	.392	.281	.033	.626	.008
Iowa -----	6.8	20.5	63.3	.364	.380	.016	.880	.009
Kansas -----	6.0	18.7	53.3	.382	(D)	(D)	.699	.010
Kentucky -----	7.1	17.5	51.8	.373	.320	.038	.753	.020
Louisiana -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Maine -----	3.6	17.5	(D)	(D)	(D)	(D)	(D)	(D)
Maryland -----	9.4	18.1	52.5	.401	(D)	.036	.828	.015
Massachusetts -----	5.0	22.8	86.0	.314	.295	.065	.594	.016
Michigan -----	5.5	22.3	78.6	.318	.343	.052	.686	.013
Minnesota -----	6.4	22.5	80.6	.322	.377	.065	.849	.009
Mississippi -----	4.1	11.2	(D)	(D)	(D)	(D)	(D)	(D)
Missouri -----	8.0	18.8	52.8	.401	.297	.039	.689	.010
Montana -----	5.3	15.3	64.5	.267	.373	(D)	.914	.006
Nebraska -----	5.9	17.0	56.5	.333	.299	*.154	.648	.010
Nevada -----	13.5	18.5	(D)	(D)	(D)	(D)	(D)	(D)
New Hampshire -----	3.3	20.1	73.1	.317	.368	.033	.792	.014
New Jersey -----	4.9	22.4	90.2	.296	(D)	.095	.684	.015
New Mexico -----	7.0	13.1	(D)	(D)	(D)	(D)	(D)	(D)
New York -----	5.5	24.3	89.8	.321	.293	.121	.528	.015
North Carolina -----	5.8	13.8	39.5	.390	(D)	.062	.893	.011
North Dakota -----	4.3	16.7	(D)	(D)	(D)	(D)	(D)	(D)
Ohio -----	5.6	20.2	67.3	.340	.322	.052	.661	.012
Oklahoma -----	10.5	22.6	66.2	.375	(D)	(D)	.426	(S)
Oregon -----	4.7	22.0	76.6	.335	.422	.035	.752	.019
Pennsylvania -----	6.5	21.5	70.0	.352	.312	.056	.662	.014
Rhode Island -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
South Carolina -----	5.9	11.7	33.3	.385	(D)	(D)	(S)	.015
South Dakota -----	7.2	15.8	(D)	(D)	(D)	(D)	(D)	(D)
Tennessee -----	6.9	16.0	45.0	.395	.340	(D)	.751	.013
Texas -----	9.5	16.3	60.8	.310	.375	.100	.656	.011
Utah -----	5.4	18.1	(D)	(D)	(D)	(D)	(D)	(D)
Vermont -----	3.1	20.0	66.9	.339	.306	.024	.682	.006
Virginia -----	7.3	15.7	47.6	.371	(D)	(D)	.765	.013
Washington -----	5.2	21.9	81.9	.314	.382	.031	.797	.015
West Virginia -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Wisconsin -----	6.5	23.1	82.2	.325	.366	.036	.730	.012
Wyoming -----	4.6	13.9	58.7	.273	.276	.031	.706	.009

CENSUS TIPS

PROCESS NAME:	BATCH_166	
ACCOUNT:	MCD-CMCB	
UIC:	[MCD_CMCB,J_EVANS]	
NODE:	EPCV24	
UPF OUTPUT:	CON_CENPROD:[CEN.DATA]J_EV_T	
DATE/ TIME:	10/ 24/ 95 15:31:20	
USER:	J_EVANS	
TABLE LAYOUT PARAMETERS:	J_EV_INDTAB.TLP;60	10/ 24/ 95 15:30:16
INPUT DATA FILE:	J_EV_T1.DAT;59	10/ 24/ 95 15:29:06
TABLE SUMMARY FILE:	TIPS92-15303484.DAT;1	10/ 24/ 95 15:30:38
UNCOMPOSED TABLE FILE:	TIPS93-15303484.DAT;1	10/ 24/ 95 15:30:38
META FILE:	TIPS96-15303484.DAT;1	10/ 24/ 95 15:31:09

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
- **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
- **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.

Nonbuilding construction:

- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
- **Outdoor swimming pools.** Includes wading pools and reflecting pools.
- **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
- **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
- **Fencing.** Includes all types of fencing.
- **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
- **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
- **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- **Harbor and port facilities.** Includes docks, piers, and wharves.
- **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
- **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
- **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
- **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
- **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

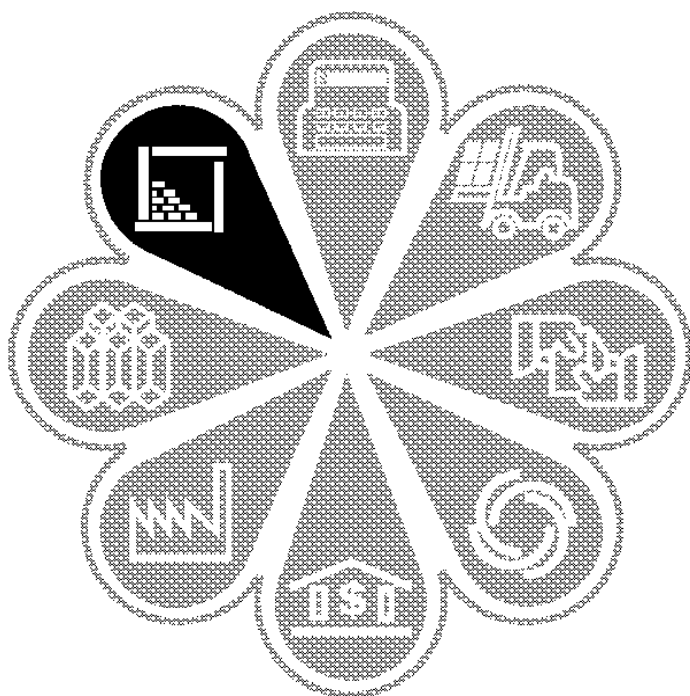
Census of Construction Industries

CC92-I-14

INDUSTRY SERIES

Plastering, Drywall, Acoustical and Insulation Work Special Trade Contractors

Industry 1742



1992

Census of

Construction Industries

CC92-I-14

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Issued July 1995



U.S. Department of Commerce

Ronald H. Brown, Secretary

David J. Barram, Deputy Secretary

Economics and Statistics Administration

Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS

Martha Farnsworth Riche, Director

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This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Juliana Van Berkum**, **Susan L. Hostetter**, **Doris M. Kling**, **Carolyn J. Stone**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke**. Under the direction of **C. Lloyd Anderson**, the Systems Support Staff maintained the small computers and assisted in the management of computer output.

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Plastering, Drywall, Acoustical and Insulation Work Special Trade Contractors

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Summary of Findings

Establishments classified in this industry are primarily engaged in drywall, acoustical, and building insulation work; applying plaster, plain or ornamental; or the installation of lathing or other appurtenances to receive plaster. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$14.2 billion in total dollar value of business. Of this amount, \$14.1 billion were for the value of construction work. These establishments paid out \$4.7 billion for materials, components, and supplies and \$1.2 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$191 million. Value added for 1992 was \$8.1 billion.

There were 18,648 establishments with total employment averaging 206,670 during the year. Total payroll for 1992 was \$4.9 billion.

Larger establishments with 20 employees or more, while representing only 14 percent of the total number of

employer establishments in this industry, accounted for 62 percent of all business done.

A “construction establishment” is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

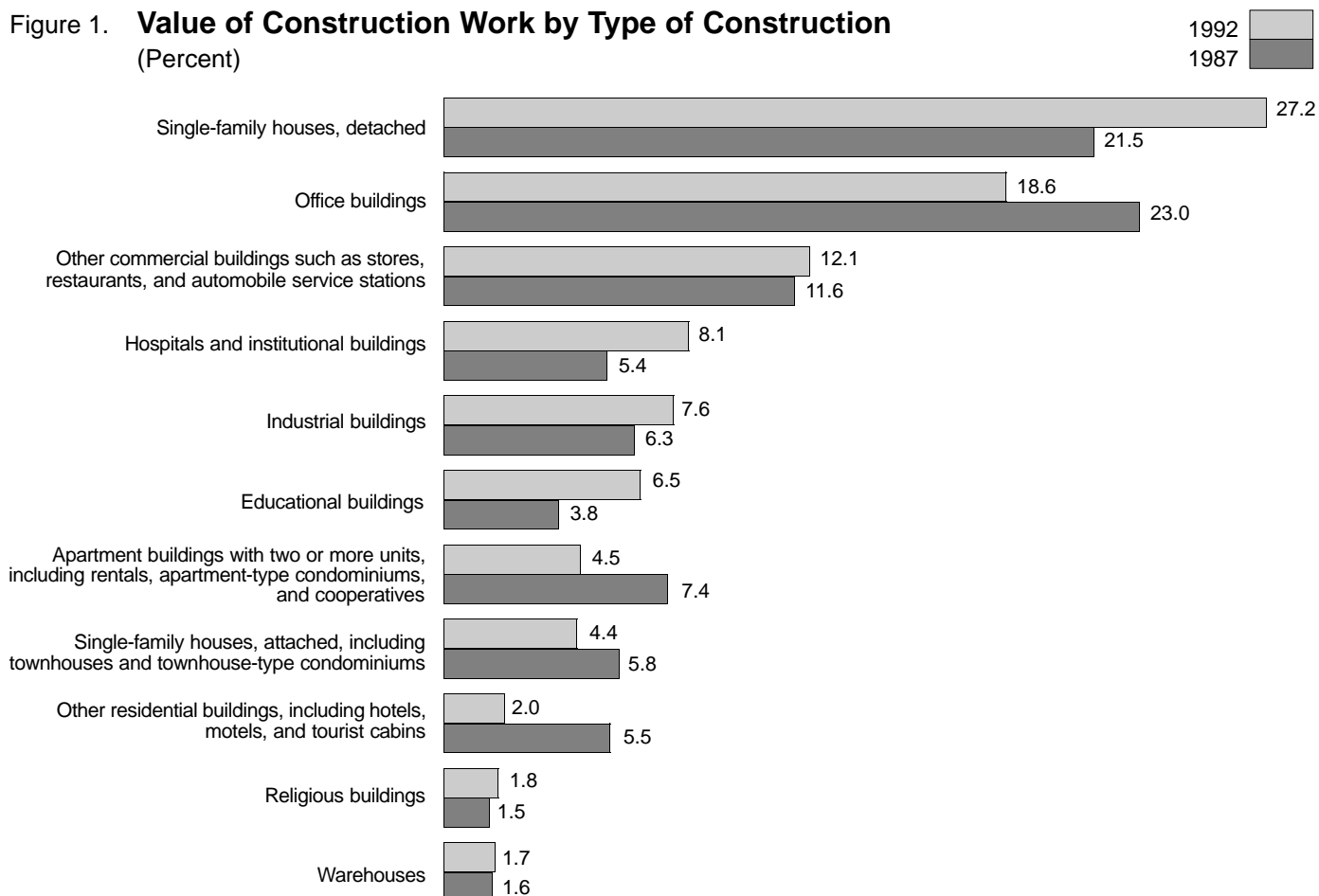


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

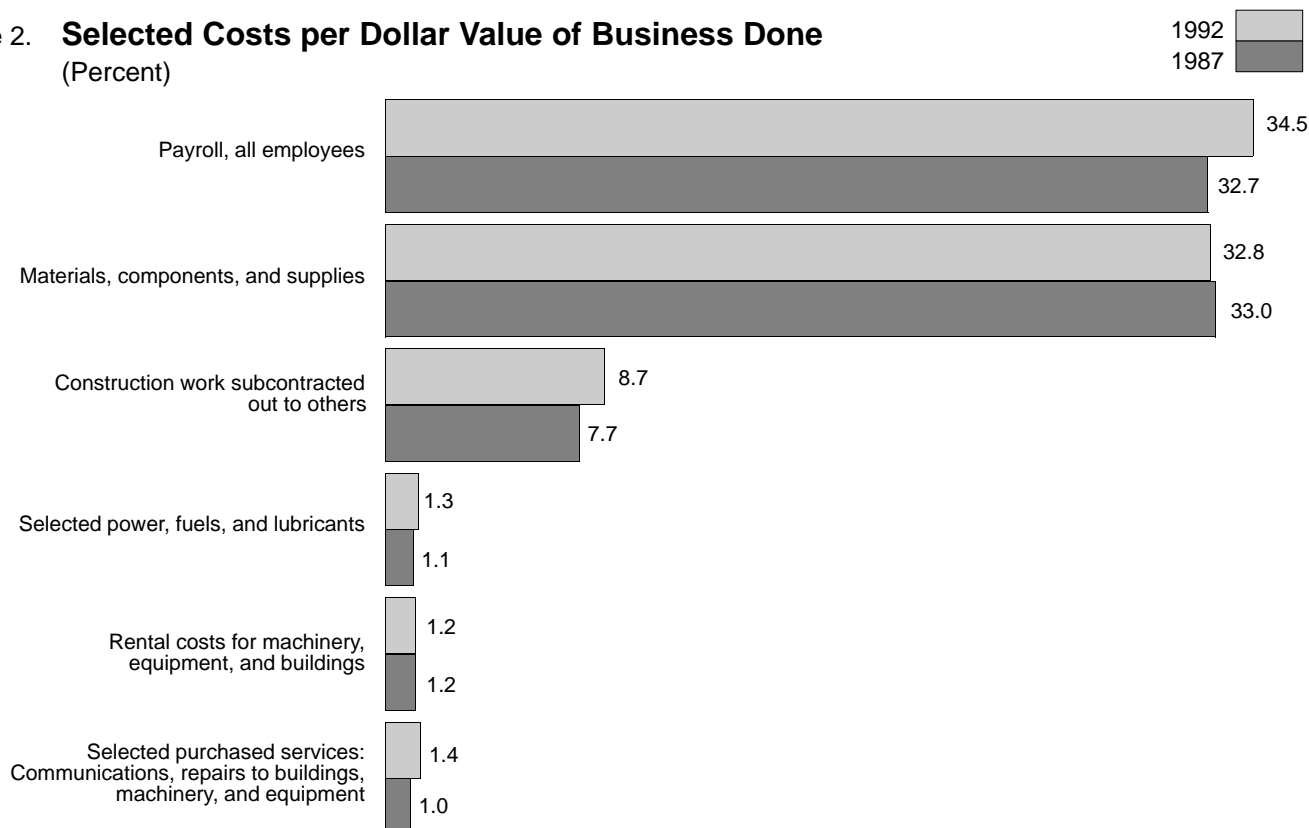


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	18 648	206 670	173 465	4 910 081	3 825 766	14 055 774	12 824 151	8 143 169	4 852 512
Alabama -----	233	2 693	2 223	50 292	38 185	168 090	155 048	92 605	(S)
Alaska -----	50	284	224	10 548	8 632	32 588	31 564	12 959	18 654
Arizona -----	430	7 908	6 983	150 872	124 199	387 576	369 049	225 553	147 636
Arkansas -----	103	1 361	1 139	22 367	18 762	79 666	75 511	44 652	32 574
California -----	3 254	34 818	29 853	858 702	686 094	2 288 999	2 149 839	1 415 408	752 487
Colorado -----	345	4 236	3 657	88 350	69 527	238 147	226 037	141 767	84 848
Connecticut -----	215	1 966	1 568	57 828	41 741	166 660	153 035	99 535	55 917
Delaware -----	77	619	509	14 999	10 931	40 665	36 700	22 834	14 611
District of Columbia -----	4	94	81	2 936	1 881	5 464	4 893	3 175	1 718
Florida -----	1 405	13 995	11 328	273 741	200 317	944 259	801 458	465 298	352 294
Georgia -----	398	5 010	4 202	98 086	77 326	352 649	325 415	185 109	147 052
Hawaii -----	94	1 452	1 185	52 637	42 090	130 474	125 301	78 387	48 336
Idaho -----	143	966	872	16 285	13 696	53 951	48 002	28 704	19 468
Illinois -----	662	8 131	6 777	248 242	193 627	667 049	615 737	407 341	212 219
Indiana -----	354	3 617	3 008	86 106	67 303	243 495	222 410	139 347	83 978
Iowa -----	167	1 701	1 458	38 986	30 757	101 215	91 431	59 700	34 134
Kansas -----	164	1 647	1 398	38 156	30 326	100 386	92 855	59 013	37 532
Kentucky -----	191	2 669	2 251	54 944	42 640	159 182	147 183	96 659	54 804
Louisiana -----	166	3 143	2 700	82 793	54 568	189 840	177 356	107 750	74 313
Maine -----	73	621	482	12 871	9 041	38 637	35 909	20 024	16 678
Maryland -----	469	6 844	5 771	174 245	131 795	449 112	399 132	263 559	137 750
Massachusetts -----	424	2 952	2 391	79 571	62 070	245 092	222 640	149 080	76 593
Michigan -----	592	4 684	3 881	109 857	83 875	355 881	302 056	184 438	122 091
Minnesota -----	350	3 588	2 969	101 244	78 846	280 088	249 851	160 189	91 897
Mississippi -----	101	1 149	970	20 171	16 021	60 687	56 156	34 168	22 121
Missouri -----	425	3 778	3 179	95 728	78 303	236 275	213 284	143 975	77 302
Montana -----	60	207	177	3 829	2 955	16 859	14 441	7 704	8 711
Nebraska -----	132	1 247	1 069	26 095	21 073	85 369	76 441	50 809	27 190
Nevada -----	176	3 360	2 965	80 093	68 056	205 508	191 341	123 767	70 240
New Hampshire -----	105	967	781	25 301	18 965	91 165	77 917	43 560	34 477
New Jersey -----	436	5 106	4 240	167 067	128 180	444 705	398 241	274 721	126 479
New Mexico -----	169	1 566	1 347	24 788	20 397	68 582	65 307	41 432	24 108
New York -----	835	10 241	8 454	333 207	260 072	908 644	817 962	566 611	255 819
North Carolina -----	515	5 827	4 763	108 527	81 670	357 618	314 441	187 097	138 234
North Dakota -----	23	179	147	4 086	2 546	13 198	12 254	6 804	5 740
Ohio -----	682	6 769	5 537	156 796	120 835	460 377	422 405	267 945	162 999
Oklahoma -----	200	1 533	1 238	26 703	20 835	83 953	71 667	42 909	29 310
Oregon -----	349	2 772	2 314	64 249	51 312	179 089	166 502	111 101	58 957
Pennsylvania -----	607	7 713	6 664	218 224	175 132	601 997	556 155	364 189	198 219
Rhode Island -----	104	609	513	14 971	11 896	43 086	40 424	28 090	12 346
South Carolina -----	228	2 809	2 294	53 732	40 602	172 100	158 331	91 492	69 816
South Dakota -----	52	395	341	7 182	6 211	23 529	22 268	14 752	7 516
Tennessee -----	285	3 743	3 040	70 937	51 239	247 437	228 024	128 658	105 448
Texas -----	826	10 489	8 681	208 612	159 034	707 091	614 901	368 672	249 662
Utah -----	216	2 244	1 952	41 311	33 317	128 771	120 730	65 368	55 751
Vermont -----	24	167	137	3 772	2 903	10 701	9 600	5 626	4 553
Virginia -----	468	6 885	5 724	149 324	112 635	401 947	368 674	229 416	146 479
Washington -----	739	7 510	6 367	176 392	141 915	480 554	456 094	294 988	163 771
West Virginia -----	30	249	211	5 613	4 512	15 640	13 584	9 612	4 010
Wisconsin -----	441	3 856	3 203	92 553	72 076	273 405	260 526	164 408	103 877
Wyoming -----	55	305	245	6 163	4 848	18 323	18 068	12 210	5 935

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
1 231 623	11 646 187	174 422	141 601	1 183 465	253 563	16 426 850	9 747 631	1	1	3	U.S.
13 041	142 273	(S)	4 166	22 125	3 051	189 809	109 099	7	7	24	AL
1 024	29 462	413	*255	2 755	315	27 207	20 480	5	10	52	AK
18 527	364 578	3 745	6 147	36 361	10 340	496 921	299 752	3	2	11	AZ
4 156	72 342	960	*333	5 284	784	39 940	21 866	11	14	52	AR
139 160	2 021 409	37 884	22 437	202 442	48 672	3 127 372	1 969 177	1	1	8	CA
12 111	229 150	2 965	2 676	17 263	3 718	191 263	113 376	5	5	18	CO
13 625	132 493	2 505	1 188	12 211	3 663	331 590	187 487	6	4	9	CT
3 965	35 317	521	369	4 073	863	47 127	28 470	8	5	34	DE
571	(S)	55	117	904	696	20 855	12 305	(Z)	(Z)	(Z)	DC
142 800	716 584	10 471	10 378	71 758	19 940	1 194 405	609 418	4	3	12	FL
27 234	281 909	3 085	3 278	31 332	6 337	371 905	205 098	4	4	21	GA
5 173	119 420	(S)	1 390	12 639	797	60 598	42 422	5	4	7	HI
5 948	45 755	856	465	4 431	675	40 875	18 477	7	10	17	ID
51 312	564 434	8 582	6 667	56 086	9 706	648 472	426 387	3	3	13	IL
21 085	184 173	1 891	1 894	15 417	3 272	211 377	115 873	5	4	21	IN
9 784	76 793	1 405	(S)	10 633	1 151	68 217	38 163	6	6	(S)	IA
7 531	86 263	711	1 551	8 555	1 759	109 759	63 993	5	5	17	KS
11 999	121 522	1 657	1 697	13 496	3 232	168 467	95 692	5	5	22	KY
12 484	90 442	1 491	1 769	15 222	2 690	136 240	94 188	3	3	16	LA
(S)	33 520	*429	*22	5 684	1 522	106 069	76 901	16	15	42	ME
49 981	409 776	4 796	4 320	40 736	8 135	534 534	319 049	4	2	16	MD
22 453	177 851	3 315	2 244	19 299	6 470	482 165	287 807	9	10	23	MA
53 825	258 325	4 257	2 356	30 206	4 741	337 596	182 489	4	3	12	MI
30 236	245 446	3 629	2 405	23 469	3 070	268 563	149 313	4	4	20	MN
4 531	55 734	705	1 043	6 750	1 008	52 494	30 471	15	8	8	MS
22 991	180 247	1 934	2 491	19 461	4 652	300 349	184 789	4	3	19	MO
*2 418	11 370	102	224	1 347	131	5 348	3 737	13	11	13	MT
8 928	(S)	*1 445	866	8 303	1 235	72 562	41 936	8	6	32	NE
14 167	174 515	2 924	1 645	14 762	2 656	119 984	78 448	3	5	15	NV
13 248	78 699	1 242	(S)	(S)	2 179	167 717	85 716	7	6	(S)	NH
46 464	390 026	4 405	6 673	40 790	7 278	624 373	368 401	4	5	9	NJ
*3 276	60 666	800	1 116	7 625	1 801	83 570	51 118	15	15	23	NM
90 681	753 466	10 942	5 351	66 883	16 365	1 276 255	812 851	2	2	10	NY
43 177	292 234	3 962	3 903	35 895	6 092	339 271	177 962	4	4	27	NC
*944	*11 477	*222	*459	*1 806	359	16 209	11 379	14	17	52	ND
37 972	399 842	5 858	5 209	42 789	7 272	453 007	276 207	4	3	13	OH
(S)	50 752	774	*1 183	10 208	1 397	74 300	42 728	8	8	52	OK
12 587	144 250	2 756	1 965	13 456	2 032	102 970	64 388	5	5	31	OR
45 843	433 469	6 960	3 486	46 944	11 157	970 380	611 532	2	2	13	PA
2 662	34 169	290	325	3 654	1 196	90 488	59 429	11	7	7	RI
13 769	(S)	(S)	1 063	14 782	2 327	132 538	72 098	5	9	24	SC
1 261	(S)	*417	368	1 614	172	11 881	7 015	19	16	23	SD
19 413	189 091	2 502	2 137	19 162	4 950	293 342	157 789	6	5	18	TN
92 190	550 783	6 094	6 887	51 806	14 452	865 240	435 449	3	3	13	TX
(S)	119 126	1 643	1 899	10 258	1 663	93 514	52 744	7	6	18	UT
1 101	8 422	177	124	1 015	459	24 408	14 422	19	19	10	VT
33 272	329 225	6 026	4 055	33 898	8 202	513 328	298 943	3	3	14	VA
24 460	391 070	6 528	4 728	32 510	5 785	337 577	206 674	4	3	14	WA
*2 056	*12 862	420	(S)	*3 046	331	19 425	13 316	22	12	(S)	WV
12 879	239 487	3 433	3 205	22 822	2 559	166 923	95 428	3	3	15	WI
256	10 332	413	281	2 100	232	8 054	5 360	15	16	32	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year -----	18 648	17 809	16 382	16 745	1	1	1	2
Proprietors and working partners -----	7 473	5 277	5 974	10 154	2	3	3	3
All employees** -----	206 670	253 563	199 790	180 326	1	1	1	1
Construction workers:								
March -----	167 960	209 597	163 967	143 119	1	1	1	1
May -----	174 580	216 084	168 185	157 307	1	1	1	1
August -----	179 379	226 327	176 838	170 209	1	1	1	1
November -----	171 941	217 612	169 880	162 526	1	1	1	1
Average -----	173 465	217 392	171 511	158 479	1	1	1	1
Other employees:								
March -----	34 165	35 988	28 229	20 650	1	1	1	1
May -----	32 812	35 344	(NA)	(NA)	1	1	(NA)	(NA)
August -----	32 923	36 753	(NA)	(NA)	1	1	(NA)	(NA)
November -----	32 920	36 574	(NA)	(NA)	1	1	(NA)	(NA)
Average -----	33 205	36 171	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees -----	4 910 081	5 484 795	3 572 588	2 261 906	1	(Z)	(Z)	1
Payroll, construction workers -----	3 825 766	4 347 926	2 930 041	1 900 704	1	(Z)	(Z)	1
Payroll, other employees -----	1 084 315	1 136 868	642 546	361 202	1	1	(Z)	1
First-quarter payroll, all employees -----	1 136 898	1 240 482	833 830	484 553	1	1	1	(Z)
Fringe benefits, all employees -----	1 297 494	1 292 988	662 706	458 710	1	1	(Z)	(Z)
Legally required expenditures -----	882 651	889 600	510 016	252 064	1	1	1	1
Voluntary expenditures -----	414 843	403 388	152 689	206 646	1	1	1	(Z)
Dollar value of business done -----	14 227 304	16 750 794	10 205 731	6 265 565	1	1	1	1
Value of construction work -----	14 055 774	16 426 850	9 847 453	6 057 467	1	1	1	1
Value of construction work subcontracted in from others -----	11 646 187	11 653 461	6 711 830	4 436 845	1	1	1	1
Other business receipts -----	171 531	323 943	358 277	208 098	4	1	1	1
Net value of construction work† -----	12 824 151	15 137 323	9 215 255	5 819 425	1	1	(Z)	1
Value added†† -----	8 143 169	9 747 631	6 009 367	3 630 142	1	1	(Z)	1
Selected costs -----	6 084 135	7 003 162	4 196 364	2 635 423	1	1	1	1
Materials, components, and supplies -----	4 661 024	5 521 016	3 417 323	2 311 008	1	1	1	1
Construction work subcontracted out to others -----	1 231 623	1 289 527	632 198	238 042	2	2	1	1
Selected power, fuels, and lubricants -----	191 489	192 618	146 842	86 373	1	1	1	1
Electricity -----	31 469	23 317	17 159	8 691	2	2	2	1
Natural and manufactured gas -----	6 137	6 686	5 266	3 852	3	2	3	2
Gasoline and diesel fuel -----	145 188	151 494	116 851	65 956	1	1	1	1
On highway use -----	134 340	139 341	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use -----	10 848	12 153	(NA)	(NA)	5	5	(NA)	(NA)
Other, including lubricating oils and greases -----	8 694	11 120	7 564	7 874	4	3	3	2
Rental cost for machinery, equipment, and buildings -----	174 422	193 519	106 047	50 128	2	1	1	1
For machinery and equipment -----	78 528	92 670	52 089	28 488	2	2	1	2
For buildings -----	95 894	100 848	53 958	21 640	2	1	1	1
Selected purchased services -----	196 795	166 980	105 824	75 581	2	2	1	3
Communication services -----	86 810	71 029	46 944	29 797	2	3	1	1
Repairs to buildings and other structures -----	11 838	12 869	8 110	5 066	4	4	3	2
Repairs to machinery and equipment -----	98 147	83 080	50 769	40 719	2	2	2	6
Ownership of construction projects:								
Value of construction work -----	14 055 774	16 426 850	9 847 453	6 057 467	1	1	1	1
Government owned -----	2 062 780	1 820 212	1 095 617	739 240	2	2	3	1
Federal -----	548 030	667 368	(NA)	(NA)	3	3	(NA)	(NA)
State and local -----	1 514 749	1 152 844	(NA)	(NA)	2	2	(NA)	(NA)
Privately owned -----	11 992 994	14 606 637	8 751 836	5 318 227	1	1	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 113 412	990 641	2	1
Capital expenditures, other than land -----	141 601	197 843	3	2
New -----	108 922	159 571	3	2
Used -----	32 679	38 272	6	5
Retirements and disposition of depreciable assets -----	71 549	53 363	4	5
End-of-year gross book value of depreciable assets -----	1 183 465	1 135 122	2	1
Depreciation charges during year -----	137 611	158 634	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	227 097	266 517	3	3
Capital expenditures, other than land -----	13 187	30 039	6	5
New buildings and other structures -----	7 731	18 493	6	4
Used buildings and other structures -----	5 456	11 546	13	12
Retirements and disposition of depreciable assets -----	18 396	9 661	7	11
End-of-year gross book value of depreciable assets -----	221 888	286 895	3	3
Depreciation charges during year -----	17 120	25 943	4	4
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	886 316	724 124	2	2
Capital expenditures, other than land -----	128 414	167 804	3	3
New machinery and equipment, including automobiles and trucks -----	101 190	141 078	3	3
New automobiles and trucks, intended primarily for highway use -----	59 485	93 877	4	3
Used machinery and equipment, including automobiles and trucks -----	27 223	26 726	7	5
Retirements and disposition of depreciable assets -----	53 153	43 702	4	6
End-of-year gross book value of depreciable assets -----	961 576	848 226	2	2
Depreciation charges during year -----	120 491	132 690	2	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	18 648	1
Value of construction work	14 055 774	1
Establishments with inventories:		
Number	6 042	2
Value of construction work	7 983 108	1
Inventories ¹ :		
End of 1992, materials and supplies	220 994	2
End of 1991, materials and supplies	191 051	2
Establishments with no inventories:		
Number	6 596	2
Value of construction work	3 751 797	1
Establishments not reporting:		
Number	6 010	2
Value of construction work	2 320 869	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	18 648	9 647	3 866	2 604	1 782	515	204	25	4	1
All employees** -----	206 670	18 553	25 478	34 848	52 782	34 912	29 030	7 911	3 156	(D)
Payroll, all employees -----	4 910 081	302 447	463 565	773 782	1 298 601	912 393	812 404	232 604	114 285	(D)
Dollar value of business done -----	14 227 304	1 455 923	1 596 715	2 346 645	3 656 021	2 342 525	2 037 465	518 964	273 047	(D)
Value of construction work -----	14 055 774	1 443 789	1 588 641	2 325 515	3 588 940	2 308 449	2 017 651	514 245	268 543	(D)
Net value of construction work† -----	12 824 151	1 192 300	1 390 954	2 116 719	3 329 615	2 160 847	1 885 907	491 232	<u>256 577</u>	(D)
Value added†† -----	8 143 169	702 626	845 618	1 313 368	2 126 215	1 400 063	1 250 774	320 834	<u>183 672</u>	(D)
Cost of materials, components, supplies, and fuels -----	4 852 512	501 808	553 409	824 482	1 270 481	794 860	654 947	175 117	<u>77 409</u>	(D)
Cost of construction work subcontracted out to others -----	1 231 623	251 489	197 688	208 795	259 325	147 602	131 744	23 013	<u>11 966</u>	(D)
Rental cost for machinery, equipment, and buildings -----	174 422	18 124	20 133	31 474	45 162	27 607	22 508	5 926	<u>3 488</u>	(D)
Capital expenditures, other than land -----	141 601	18 250	18 417	32 241	36 671	16 252	13 808	4 977	<u>984</u>	(D)
End-of-year gross book value of depreciable assets -----	1 183 465	140 777	142 560	249 891	299 762	172 047	126 062	44 019	<u>8 347</u>	(D)
1987										
All employees** -----	253 563	(S)	25 998	36 553	63 632	45 964	44 068	14 794	<u>6 070</u>	(D)
Value of construction work -----	16 426 850	(S)	1 641 129	2 257 272	4 214 380	2 949 335	2 558 328	<u>1 540 701</u>	(D)	(D)
Value added†† -----	9 747 631	(S)	845 199	1 280 179	2 504 466	1 775 286	1 639 852	<u>830 651</u>	<u>251 695</u>	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	3	4	3	2	1	(Z)	(Z)	(Z)	(D)
Net value of construction work† -----	1	3	4	3	1	1	(Z)	(Z)	(Z)	(D)
Capital expenditures, other than land -----	3	9	10	8	4	2	(Z)	(Z)	(Z)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	18 648	(S)	(S)	2 679	4 527	3 646	2 325	2 097	772	291	146
All employees** -----	206 670	(S)	(S)	4 921	15 262	22 561	27 530	46 915	37 318	22 556	27 531
Payroll, all employees -----	4 910 081	(S)	(S)	53 342	217 427	390 542	565 041	1 123 763	942 909	678 425	922 125
Dollar value of business done -----	14 227 304	(S)	(S)	194 556	755 756	1 280 342	1 632 568	3 263 711	2 680 576	1 909 199	2 452 704
Value of construction work -----	14 055 774	(S)	(S)	194 141	750 873	1 275 321	1 621 215	3 228 193	2 623 188	1 885 588	2 419 452
Net value of construction work† -----	12 824 151	(S)	(S)	178 573	672 182	1 143 715	1 473 379	2 948 819	2 404 020	1 712 273	2 236 941
Value added†† -----	8 143 169	(S)	(S)	118 139	427 727	700 417	907 462	1 841 660	1 543 863	1 105 005	1 463 105
Cost of materials, components, supplies, and fuels -----	4 852 512	(S)	(S)	60 848	249 338	448 319	577 270	1 142 678	917 546	630 879	807 088
Cost of construction work subcontracted out to others -----	1 231 623	(S)	(S)	(S)	(S)	131 607	147 835	279 374	219 168	173 315	182 511
Rental cost for machinery, equipment, and buildings -----	174 422	(S)	(S)	2 499	(S)	19 166	20 528	41 786	31 138	23 558	25 464
Capital expenditures, other than land -----	141 601	(S)	(S)	3 335	10 231	16 289	25 367	33 910	22 271	13 280	16 589
End-of-year gross book value of depreciable assets -----	1 183 465	(S)	(S)	18 918	82 252	126 474	165 336	302 082	197 121	131 020	154 177
1987											
All employees** -----	253 563	(S)	(S)	(S)	15 320	24 226	31 193	54 972	44 960	38 152	37 507
Value of construction work -----	16 426 850	(S)	(S)	(S)	658 422	1 231 226	1 678 624	3 459 995	3 105 274	2 867 915	3 202 317
Value added†† -----	9 747 631	(S)	(S)	(S)	386 007	672 921	923 783	1 991 980	1 808 312	1 678 777	2 148 942
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	6	4	4	3	2	1	(Z)	(Z)
Net value of construction work† -----	1	(S)	(S)	5	4	4	3	2	1	(Z)	(Z)
Capital expenditures, other than land -----	3	(S)	(S)	18	12	11	9	6	1	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

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CONSTRUCTION—INDUSTRY SERIES

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	14 055 774	9 364 750	3 359 603	1 021 884	1	1	1	2
Building construction	13 510 056	9 294 746	3 302 333	912 978	1	1	1	2
Single-family houses	4 437 155	3 743 996	485 686	207 472	1	2	3	4
Single-family houses, detached	3 817 219	3 207 398	429 033	180 788	2	2	3	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	619 935	536 598	56 653	26 684	3	3	7	7
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	626 367	504 265	76 772	45 330	3	4	4	12
Other residential buildings, including hotels, motels, and tourist cabins	281 346	210 986	57 718	12 642	2	2	4	7
Hotels, motels, and tourist cabins	245 370	183 088	50 955	11 327	2	2	4	8
Other residential buildings	35 975	27 898	6 763	1 314	8	8	20	20
Office buildings	2 614 191	1 423 605	1 027 996	162 589	1	1	2	4
Other commercial buildings such as stores, restaurants, and automobile service stations	1 706 348	1 114 146	498 629	93 573	2	2	3	4
Industrial buildings and warehouses	1 313 969	730 366	329 506	254 097	2	2	2	3
Industrial buildings	1 070 431	582 850	261 538	226 044	2	2	2	2
Warehouses	243 538	147 516	67 968	28 053	3	4	4	9
Religious buildings	252 029	163 055	72 295	16 678	2	3	4	12
Educational buildings	917 593	586 236	283 580	47 777	2	2	2	4
Hospitals and institutional buildings	1 138 996	656 732	425 255	57 008	1	2	2	5
Amusement, social, and recreational buildings, indoors	119 677	89 508	26 389	3 780	4	4	7	15
Other nonresidential buildings	102 385	71 848	18 506	12 031	6	6	11	21
Nonbuilding construction	236 181	70 004	57 270	108 907	3	8	3	1
Power plants	140 701	26 536	35 770	78 395	1	2	(Z)	1
Power plants, nuclear	7 998	(S)	1 844	5 851	(Z)	(S)	(Z)	(Z)
Power plants and cogeneration plants, except nuclear	132 702	26 232	33 926	72 544	1	2	(Z)	1
Other nonbuilding construction	95 480	43 468	21 500	30 512	7	12	8	4
Construction work, n.s.k.	309 536	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
1987								
Value of construction work	16 426 850	12 104 160	2 913 835	1 064 836	1	1	1	2
Building construction	15 522 617	11 830 335	2 809 300	882 983	1	1	1	2
Single-family houses	4 486 565	3 946 095	336 764	203 705	1	2	3	4
Single-family houses, detached	3 533 295	3 074 519	291 282	167 494	2	2	3	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	953 269	871 576	45 482	36 210	3	3	8	6
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	1 222 838	1 094 049	78 861	49 927	3	3	4	6
Other residential buildings, including hotels, motels, and tourist cabins	898 641	743 151	121 995	33 493	2	2	6	8
Hotels, motels, and tourist cabins	689 525	596 905	79 377	13 242	2	3	2	3
Other residential buildings	209 116	146 246	42 618	20 251	6	5	18	14
Office buildings	3 783 203	2 610 072	998 683	174 448	1	1	1	3
Other commercial buildings such as stores, restaurants, and automobile service stations	1 904 274	1 395 920	404 259	104 093	1	1	2	4
Industrial buildings and warehouses	1 294 473	830 566	276 807	187 100	2	3	2	2
Industrial buildings	1 033 733	639 724	229 086	164 922	3	4	3	2
Warehouses	260 740	190 841	47 720	22 177	2	2	3	8
Religious buildings	240 339	174 178	51 363	14 797	2	2	5	8
Educational buildings	625 741	383 824	188 815	53 101	2	2	2	9
Hospitals and institutional buildings	894 437	549 184	295 621	49 631	1	1	1	4
Amusement, social, and recreational buildings, indoors	72 963	53 123	14 277	5 561	2	3	4	8
Other nonresidential buildings	99 143	50 173	41 843	7 127	6	7	9	30
Nonbuilding construction	560 215	273 825	104 536	181 853	2	2	6	2
Power plants	290 620	170 798	24 067	95 754	1	(Z)	5	1
Power plants, nuclear	154 890	125 347	4 496	25 046	(Z)	(Z)	(Z)	(Z)
Power plants and cogeneration plants, except nuclear	135 730	45 451	19 570	70 708	1	1	6	1
Other nonbuilding construction	269 595	103 027	80 468	86 099	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	344 018	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments -----	18 648	206 670	4 910 081	14 055 774	7 544 428	12 824 151	8 143 169	1 231 623	1	1	2
Establishments not specializing by type -----	4 139	71 700	1 823 375	4 951 956	(NA)	4 519 924	2 928 344	432 033	1	1	3
Establishments specializing 51 percent or more -----	14 509	134 971	3 086 706	9 103 817	7 544 428	8 304 227	5 214 826	799 590	1	1	3
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	8 385	62 762	1 200 802	3 869 346	3 315 421	3 522 858	2 064 005	346 488	2	2	6
Establishments with —											
100 percent specialization -----	3 414	16 175	283 259	959 923	959 923	842 434	500 742	117 488	4	4	11
90 to 99 percent specialization -----	2 170	17 378	330 820	1 109 878	1 039 886	998 022	588 908	111 856	3	4	11
80 to 89 percent specialization -----	1 235	11 250	218 254	697 679	577 538	647 321	371 438	50 358	4	4	12
70 to 79 percent specialization -----	866	8 243	169 302	532 471	388 898	494 934	289 157	37 538	5	4	13
60 to 69 percent specialization -----	539	7 881	160 708	453 255	284 933	426 586	252 155	26 669	4	4	9
51 to 59 percent specialization -----	161	1 835	38 460	116 139	64 243	113 561	61 604	2 579	10	5	20
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	653	4 522	93 284	293 529	241 869	264 499	168 490	29 030	7	6	11
Establishments with —											
100 percent specialization -----	(S)	1 721	34 130	115 237	115 237	102 839	68 739	12 398	9	9	16
90 to 99 percent specialization -----	69	277	6 286	18 709	17 531	17 958	12 794	750	25	28	18
80 to 89 percent specialization -----	47	432	8 265	25 210	20 847	24 977	16 312	233	16	16	6
70 to 79 percent specialization -----	73	1 057	18 568	63 086	45 152	56 234	32 236	6 852	17	15	25
60 to 69 percent specialization -----	71	766	20 435	53 655	33 333	48 456	29 430	5 200	19	19	25
51 to 59 percent specialization -----	52	269	5 601	17 633	9 770	14 036	8 979	(S)	19	20	(S)
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type -----	375	2 915	59 973	206 867	165 077	168 300	104 132	38 567	10	11	27
Establishments with —											
100 percent specialization -----	118	679	12 419	58 581	58 581	38 094	20 019	*20 486	24	29	48
90 to 99 percent specialization -----	*26	270	6 577	24 715	22 440	21 694	13 319	*3 021	22	29	59
80 to 89 percent specialization -----	40	457	9 202	27 713	22 305	24 235	15 336	3 478	26	24	39
70 to 79 percent specialization -----	(S)	431	8 519	36 930	26 742	32 375	19 349	4 554	18	18	37
60 to 69 percent specialization -----	58	599	14 611	36 789	22 822	32 654	22 904	4 135	25	20	34
51 to 59 percent specialization -----	*27	478	8 646	22 139	12 186	19 247	13 205	2 892	25	23	15
OFFICE BUILDINGS											
All establishments specializing in type -----	1 451	23 410	704 301	1 889 603	1 470 528	1 694 271	1 137 780	195 332	2	2	7
Establishments with —											
100 percent specialization -----	444	4 027	120 930	328 955	328 955	293 412	203 682	35 543	7	7	16
90 to 99 percent specialization -----	(S)	3 077	96 593	264 784	250 591	229 223	150 337	35 561	5	6	32
80 to 89 percent specialization -----	177	2 678	88 473	245 106	201 133	207 759	138 752	37 348	5	4	4
70 to 79 percent specialization -----	264	5 718	169 199	454 248	327 568	409 884	274 079	44 364	4	3	4
60 to 69 percent specialization -----	221	5 865	171 830	448 713	281 731	419 420	286 621	29 293	3	2	2
51 to 59 percent specialization -----	122	2 045	57 275	147 796	80 550	134 572	84 308	13 224	6	6	13
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	1 124	13 612	323 365	909 090	773 220	834 043	537 434	75 047	4	3	9
Establishments with —											
100 percent specialization -----	393	6 010	149 293	425 336	425 336	384 539	234 005	40 796	6	5	14
90 to 99 percent specialization -----	122	1 320	34 734	91 669	84 755	81 457	54 331	10 212	12	13	24
80 to 89 percent specialization -----	90	1 055	23 831	74 962	61 196	71 805	49 766	3 157	10	8	13
70 to 79 percent specialization -----	234	1 898	38 164	100 936	72 766	95 875	65 464	5 061	11	9	26
60 to 69 percent specialization -----	188	2 570	57 918	157 141	97 125	145 832	98 872	11 309	10	7	15
51 to 59 percent specialization -----	97	758	19 424	59 046	32 043	54 536	34 995	4 510	16	17	24
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	528	9 271	236 113	670 934	557 736	641 863	425 123	29 072	3	3	4
Establishments with —											
100 percent specialization -----	200	3 146	84 572	192 986	192 986	186 793	131 286	6 192	3	4	5
90 to 99 percent specialization -----	58	412	8 103	21 687	20 253	(D)	12 831	(D)	23	22	(D)
80 to 89 percent specialization -----	(S)	3 352	80 762	287 416	236 626	286 408	167 996	1 008	7	5	17
70 to 79 percent specialization -----	(S)	573	17 347	46 773	34 208	40 181	27 954	6 592	10	7	11
60 to 69 percent specialization -----	86	1 013	24 841	79 754	50 467	(D)	49 238	(D)	14	6	(D)
51 to 59 percent specialization -----	9	774	20 488	42 318	23 196	39 940	35 818	2 378	2	3	1
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type -----	240	5 290	159 662	378 564	257 844	355 986	247 188	22 578	4	3	7
Establishments with —											
100 percent specialization -----	50	331	8 418	20 396	20 396	19 784	15 074	(S)	18	16	(S)
90 to 99 percent specialization -----	(S)	315	8 083	21 948	20 880	18 728	12 158	3 219	16	10	5
80 to 89 percent specialization -----	(S)	555	(S)	(S)	(S)	(S)	(S)	(S)	13	(S)	(S)
70 to 79 percent specialization -----	34	910	27 314	63 890	46 064	59 275	42 702	4 615	11	8	8
60 to 69 percent specialization -----	34	1 666	52 146	122 854	75 805	117 688	77 855	5 166	8	6	27
51 to 59 percent specialization -----	35	1 512	47 579	106 535	59 339	102 170	72 689	4 365	4	2	(Z)

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CONSTRUCTION—INDUSTRY SERIES

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	18 648	173 465	167 960	174 580	179 379	171 941	1	1	1	1	1	1
Alabama	233	2 223	2 188	2 219	2 297	2 189	9	7	9	9	6	6
Alaska	50	224	251	180	178	285	11	5	6	6	7	6
Arizona	430	6 983	6 720	6 934	7 168	7 112	6	3	3	3	2	3
Arkansas	103	1 139	978	1 161	1 246	1 171	13	10	10	10	12	11
California	3 254	29 853	29 134	30 905	30 857	28 517	2	1	2	2	2	2
Colorado	345	3 657	3 564	3 686	3 964	3 413	6	5	4	7	5	5
Connecticut	215	1 568	1 447	1 491	1 632	1 704	7	6	7	7	5	5
Delaware	77	509	563	486	487	501	11	8	11	8	11	10
District of Columbia	4	81	61	114	101	48	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Florida	1 405	11 328	10 907	11 346	11 319	11 741	3	4	4	4	4	4
Georgia	398	4 202	4 378	4 301	4 168	3 963	7	4	4	4	4	4
Hawaii	94	1 185	1 229	1 149	1 163	1 200	9	6	5	5	6	5
Idaho	143	872	767	762	1 023	933	4	8	8	7	9	9
Illinois	662	6 777	6 401	6 808	7 001	6 898	5	3	4	3	4	4
Indiana	354	3 008	2 933	3 012	3 186	2 901	7	4	5	4	5	4
Iowa	167	1 458	1 313	1 444	1 602	1 472	10	6	6	6	6	6
Kansas	164	1 398	1 376	1 408	1 475	1 333	11	6	5	6	6	5
Kentucky	191	2 251	2 157	2 316	2 320	2 210	8	4	5	3	5	6
Louisiana	166	2 700	2 514	2 672	2 793	2 821	9	3	3	3	3	3
Maine	73	482	452	490	459	526	18	15	14	14	17	15
Maryland	469	5 771	5 708	5 893	5 900	5 585	4	4	3	4	5	5
Massachusetts	424	2 391	2 090	2 098	2 576	2 801	6	11	5	5	18	17
Michigan	592	3 881	3 827	3 869	4 115	3 713	5	4	4	5	5	5
Minnesota	350	2 969	2 713	2 949	3 224	2 991	7	4	4	5	5	5
Mississippi	101	970	974	937	969	1 000	15	15	16	16	13	14
Missouri	425	3 179	2 998	3 047	3 450	3 221	6	4	4	4	5	4
Montana	60	177	194	179	180	158	8	15	14	14	15	16
Nebraska	132	1 069	1 046	1 082	1 132	1 016	6	8	8	9	8	8
Nevada	176	2 965	2 884	2 774	3 007	3 194	7	4	5	4	4	3
New Hampshire	105	781	738	766	750	869	8	8	7	12	6	12
New Jersey	436	4 240	4 335	4 454	4 415	3 758	5	5	3	5	5	6
New Mexico	169	1 347	1 272	1 408	1 481	1 229	11	15	17	17	18	12
New York	835	8 454	8 375	8 357	8 735	8 349	5	2	2	2	2	3
North Carolina	515	4 763	4 735	4 703	4 851	4 765	5	3	4	4	4	4
North Dakota	23	147	115	148	158	168	39	12	11	17	17	15
Ohio	682	5 537	5 196	5 531	5 796	5 626	4	4	3	4	4	3
Oklahoma	200	1 238	1 205	1 238	1 239	1 269	10	8	9	8	8	7
Oregon	349	2 314	2 235	2 502	2 260	2 260	5	5	6	5	5	7
Pennsylvania	607	6 664	6 413	6 769	7 091	6 381	4	2	2	2	2	2
Rhode Island	104	513	520	504	511	515	17	12	12	11	12	12
South Carolina	228	2 294	2 054	2 298	2 267	2 557	6	4	5	4	4	10
South Dakota	52	341	306	324	351	385	11	19	20	20	18	22
Tennessee	285	3 040	2 912	3 058	3 150	3 040	8	6	6	6	6	7
Texas	826	8 681	8 592	8 463	8 995	8 675	5	3	3	3	3	4
Utah	216	1 952	1 846	1 925	1 994	2 044	8	7	7	7	7	7
Vermont	24	137	112	101	173	162	37	18	20	21	19	19
Virginia	468	5 724	5 565	6 084	5 752	5 496	5	3	3	3	3	3
Washington	739	6 367	6 232	6 526	6 649	6 060	4	4	4	4	4	6
West Virginia	30	211	243	213	185	206	36	25	23	26	30	25
Wisconsin	441	3 203	3 011	3 236	3 365	3 199	5	3	4	4	3	3
Wyoming	55	245	180	264	221	315	21	15	9	18	22	12

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	14 055 774	18 519	12 947 456	3 115	1 108 318	16 426 850	-14.4	1	1	2
Alabama -----	156 775	(S)	139 059	51	17 716	170 735	-8.2	6	6	1
Alaska -----	17 097	(S)	15 302	5	1 794	32 291	-47.1	20	22	23
Arizona -----	348 581	429	343 257	19	5 324	492 224	-29.2	2	2	1
Arkansas -----	67 694	(S)	58 201	34	9 494	46 667	45.1	15	18	5
California -----	2 330 984	3 246	2 267 513	47	63 471	3 191 226	-27.0	1	1	1
Colorado -----	246 659	345	235 738	30	10 920	194 165	27.0	5	5	10
Connecticut -----	181 275	206	157 677	96	23 598	340 805	-46.8	5	5	17
Delaware -----	58 502	(S)	32 612	65	25 890	62 479	-6.4	4	7	1
District of Columbia -----	77 216	4	4 319	161	72 896	109 205	-29.3	2	(Z)	2
Florida -----	957 230	1 404	922 941	61	34 289	1 227 469	-22.0	4	4	9
Georgia -----	348 821	397	324 264	97	24 557	386 052	-9.6	4	5	12
Hawaii -----	151 836	(S)	130 474	*17	21 362	61 746	145.9	3	4	1
Idaho -----	56 052	(S)	51 861	61	4 191	31 281	79.2	11	11	18
Illinois -----	669 494	661	643 625	104	25 870	631 946	5.9	3	3	4
Indiana -----	251 880	353	229 572	93	22 308	207 997	21.1	4	4	13
Iowa -----	111 275	167	98 094	42	13 180	67 149	65.7	5	5	1
Kansas -----	102 234	162	81 547	66	20 686	111 668	-8.4	4	5	9
Kentucky -----	159 661	191	129 730	135	29 931	150 613	6.0	5	7	4
Louisiana -----	169 836	(S)	151 874	49	17 962	111 244	52.7	5	4	29
Maine -----	39 976	(S)	35 481	*27	*4 495	79 637	-49.8	15	15	54
Maryland -----	363 256	461	325 019	156	38 238	433 307	-16.2	3	3	6
Massachusetts -----	268 754	409	221 829	108	46 924	552 282	-51.3	8	10	13
Michigan -----	357 299	592	345 377	53	11 922	348 134	2.6	3	3	15
Minnesota -----	265 827	345	259 313	34	6 514	268 019	-8	4	4	13
Mississippi -----	63 835	101	54 300	66	9 535	53 496	19.3	7	8	13
Missouri -----	225 050	425	210 670	57	14 380	293 738	-23.4	3	3	8
Montana -----	21 266	60	(D)	5	(D)	5 822	265.3	12	(D)	(D)
Nebraska -----	78 807	132	74 809	*19	3 998	65 023	21.2	7	7	2
Nevada -----	237 739	175	198 850	55	38 889	121 144	96.2	4	5	2
New Hampshire -----	(S)	(S)	(S)	71	8 033	158 579	(S)	(S)	(S)	20
New Jersey -----	405 078	425	374 751	90	30 327	691 775	-41.4	6	6	5
New Mexico -----	76 312	169	66 702	16	9 609	91 731	-16.8	13	14	1
New York -----	926 015	827	874 073	100	51 942	1 290 942	-28.3	2	2	4
North Carolina -----	388 879	515	338 788	104	50 091	343 669	13.2	3	4	6
North Dakota -----	12 743	23	(D)	7	(D)	16 785	-24.1	15	(D)	(D)
Ohio -----	480 999	682	440 751	99	40 248	471 150	2.1	3	3	4
Oklahoma -----	89 240	192	79 338	18	9 902	69 101	29.1	9	10	4
Oregon -----	187 956	349	168 432	42	19 524	108 851	72.7	5	5	10
Pennsylvania -----	506 066	599	458 312	115	47 754	811 778	-37.7	3	3	6
Rhode Island -----	43 154	104	36 568	43	6 586	68 028	-36.6	7	8	7
South Carolina -----	176 339	226	158 939	74	17 399	155 803	13.2	10	11	4
South Dakota -----	26 409	52	21 983	21	4 426	10 223	158.3	13	16	13
Tennessee -----	229 132	268	214 314	58	14 818	283 683	-19.2	5	5	3
Texas -----	691 325	824	662 407	48	28 918	793 233	-12.8	3	3	7
Utah -----	123 312	216	(D)	2	(D)	87 224	41.4	6	(D)	(D)
Vermont -----	12 974	(S)	10 195	26	2 778	23 776	-45.4	18	21	27
Virginia -----	432 524	468	351 592	169	80 933	571 008	-24.3	3	3	9
Washington -----	490 598	734	467 680	56	22 918	328 748	49.2	3	3	6
West Virginia -----	32 372	29	11 683	41	20 690	19 469	66.3	10	26	(Z)
Wisconsin -----	272 671	440	260 593	71	12 078	168 557	61.8	3	3	21
Wyoming -----	17 014	(S)	15 837	30	1 177	15 148	12.3	17	18	17

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	14 227 304	16 750 794	1	1
SPECIAL TRADE CONTRACTORS				
Acoustical contractor	1 524 548	1 822 722	—	1
Carpentry contractor	109 255	126 738	—	3
Drywall, sheetrock, spackling and finishing contractor	6 617 910	7 713 462	—	1
Insulation contractor	3 157 101	3 369 329	—	1
Lathing contractor	505 119	696 101	—	2
Painting contractor	123 975	(NA)	—	(NA)
Plastering contractor	1 400 808	1 778 398	—	2
Other construction activities	507 904	738 729	—	(NA)
OTHER BUSINESS ACTIVITIES				
Retail trade	74 996	105 183	—	2
Wholesale trade	50 958	114 246	—	2
Other business activities	39 182	92 943	—	2
Kind of business activity, n.s.k.	115 547	192 943	—	7

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	11.1	14.2	1
Number of construction workers	9.3	12.2	1
Number of all other employees	1.8	2.0	1
Payroll, all employees \$1,000 ..	263.3	308.0	1
Payroll, construction workers do ..	205.2	244.1	1
Payroll, other employees do ..	58.1	63.8	1
Dollar value of business done do ..	763.0	940.6	1
Value of construction work do ..	753.8	922.4	1
Cost of materials, components, supplies, and fuels do ..	260.2	320.8	1
Construction work subcontracted to others do ..	66.0	72.4	2
Rental cost for machinery, equipment, and buildings do ..	9.4	10.9	2
Capital expenditures, other than land do ..	7.6	11.1	3
Gross book value of depreciable assets do ..	63.5	63.7	2
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	23.8	21.6	—
Dollar value of business done do ..	68.8	66.1	(Z)
Value added†† do ..	39.4	38.4	(Z)
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	22.1	20.0	(Z)
Value of construction work do ..	81.0	75.6	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	32.7	31.4	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.349	.334	—
Cost of materials, components, supplies, and fuels do ..	.345	.348	—
Cost of construction work subcontracted out to others do ..	.088	.079	2
Value of construction work subcontracted in from others do ..	.829	.709	1
Rental cost for machinery, equipment, and buildings do ..	.012	.012	2

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	11.1	23.8	81.0	.349	.345	.088	.829	.012
Alabama -----	11.5	18.7	75.6	.299	(S)	.078	.846	(S)
Alaska -----	5.7	37.1	145.5	.324	.572	.031	.904	.013
Arizona -----	18.4	19.1	55.5	.389	.381	.048	.941	.010
Arkansas -----	13.3	16.4	69.9	.281	.409	.052	.908	.012
California -----	10.7	24.7	76.7	.375	.329	.061	.883	.017
Colorado -----	12.3	20.9	65.1	.371	.356	.051	.962	.012
Connecticut -----	9.1	29.4	106.3	.347	.336	.082	.795	.015
Delaware -----	8.1	24.2	79.9	.369	.359	.098	.868	.013
District of Columbia -----	23.5	31.2	67.5	.537	.314	.105	(S)	.010
Florida -----	10.0	19.6	83.4	.290	.373	.151	.759	.011
Georgia -----	12.6	19.6	83.9	.278	.417	.077	.799	.009
Hawaii -----	15.4	36.3	110.1	.403	.370	.040	.915	(S)
Idaho -----	6.8	16.9	61.9	.302	.361	.110	.848	.016
Illinois -----	12.3	30.5	98.4	.372	.318	.077	.846	.013
Indiana -----	10.2	23.8	80.9	.354	.345	.087	.756	.008
Iowa -----	10.2	22.9	69.4	.385	.337	.097	.759	.014
Kansas -----	10.0	23.2	71.8	.380	.374	.075	.859	.007
Kentucky -----	14.0	20.6	70.7	.345	.344	.075	.763	.010
Louisiana -----	19.0	26.3	70.3	.436	.391	.066	.476	.008
Maine -----	8.5	20.7	80.2	.333	.432	(S)	.868	*.011
Maryland -----	14.6	25.5	77.8	.388	.307	.111	.912	.011
Massachusetts -----	7.0	27.0	102.5	.325	.313	.092	.726	.014
Michigan -----	7.9	23.5	91.7	.309	.343	.151	.726	.012
Minnesota -----	10.2	28.2	94.3	.361	.328	.108	.876	.013
Mississippi -----	11.4	17.6	62.6	.332	.365	.075	.918	.012
Missouri -----	8.9	25.3	74.3	.405	.327	.097	.763	.008
Montana -----	3.5	18.5	95.2	.227	.517	.143	.674	.006
Nebraska -----	9.4	20.9	79.9	.306	.318	.105	(S)	.017
Nevada -----	19.1	23.8	69.3	.390	.342	.069	.849	.014
New Hampshire -----	9.2	26.2	116.7	.278	.378	.145	.863	.014
New Jersey -----	11.7	32.7	104.9	.376	.284	.104	.877	.010
New Mexico -----	9.2	15.8	50.9	.361	.352	.048	.885	.012
New York -----	12.3	32.5	107.5	.367	.282	.100	.829	.012
North Carolina -----	11.3	18.6	75.1	.303	.387	.121	.817	.011
North Dakota -----	7.9	22.8	89.8	.310	.435	*.072	.870	*.017
Ohio -----	9.9	23.2	83.1	.341	.354	.082	.869	.013
Oklahoma -----	7.7	17.4	67.8	.318	.349	(S)	.605	.009
Oregon -----	7.9	23.2	77.4	.359	.329	.070	.805	.015
Pennsylvania -----	12.7	28.3	90.3	.363	.329	.076	.720	.012
Rhode Island -----	5.9	24.6	84.0	.347	.287	.062	.793	.007
South Carolina -----	12.3	19.1	75.0	.312	.406	.080	(S)	(S)
South Dakota -----	7.6	18.2	69.0	.305	.319	.054	(S)	*.018
Tennessee -----	13.1	19.0	81.4	.287	.426	.078	.764	.010
Texas -----	12.7	19.9	81.5	.295	.353	.130	.779	.009
Utah -----	10.4	18.4	66.0	.321	.433	(S)	.925	.013
Vermont -----	6.9	22.6	78.1	.352	.425	.103	.787	.017
Virginia -----	14.7	21.7	70.2	.372	.364	.083	.819	.015
Washington -----	10.2	23.5	75.5	.367	.341	.051	.814	.014
West Virginia -----	8.3	22.5	74.1	.359	.256	*.131	.822	.027
Wisconsin -----	8.7	24.0	85.4	.339	.380	.047	.876	.013
Wyoming -----	5.5	20.2	74.8	.336	.324	.014	.564	.023

Appendix A.

Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

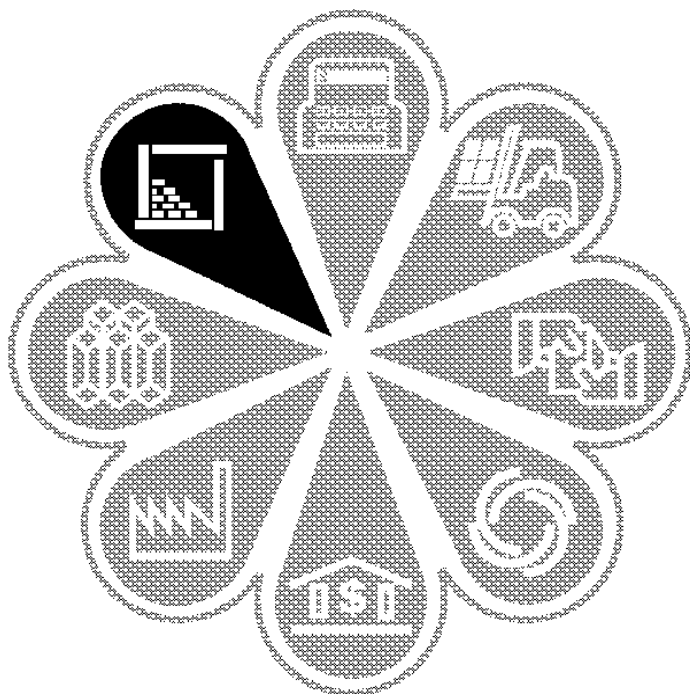
Census of Construction Industries

CC92-I-15

INDUSTRY SERIES

Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors

Industry 1743



1992

Census of

Construction Industries

CC92-I-15

INDUSTRY SERIES

Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors

Industry 1743

Issued September 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors

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Summary of Findings

Establishments classified in this industry are primarily engaged in setting and installing ceramic tile, marble, and mosaic, and in mixing marble particles and cement to make terrazzo at the site of construction. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$2.48 billion in total dollar value of business. Of this amount, \$2.44 billion were for the value of construction work. These establishments paid out \$967 million for materials, components, and supplies and \$116 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$41 million. Value added for 1992 was \$1.36 billion.

There were 6,499 establishments with total employment averaging 34,012 during the year. Total payroll for 1992 was \$775 million.

Larger establishments with 20 employees or more, while representing only 5 percent of the total number of

employer establishments in this industry accounted for 37 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

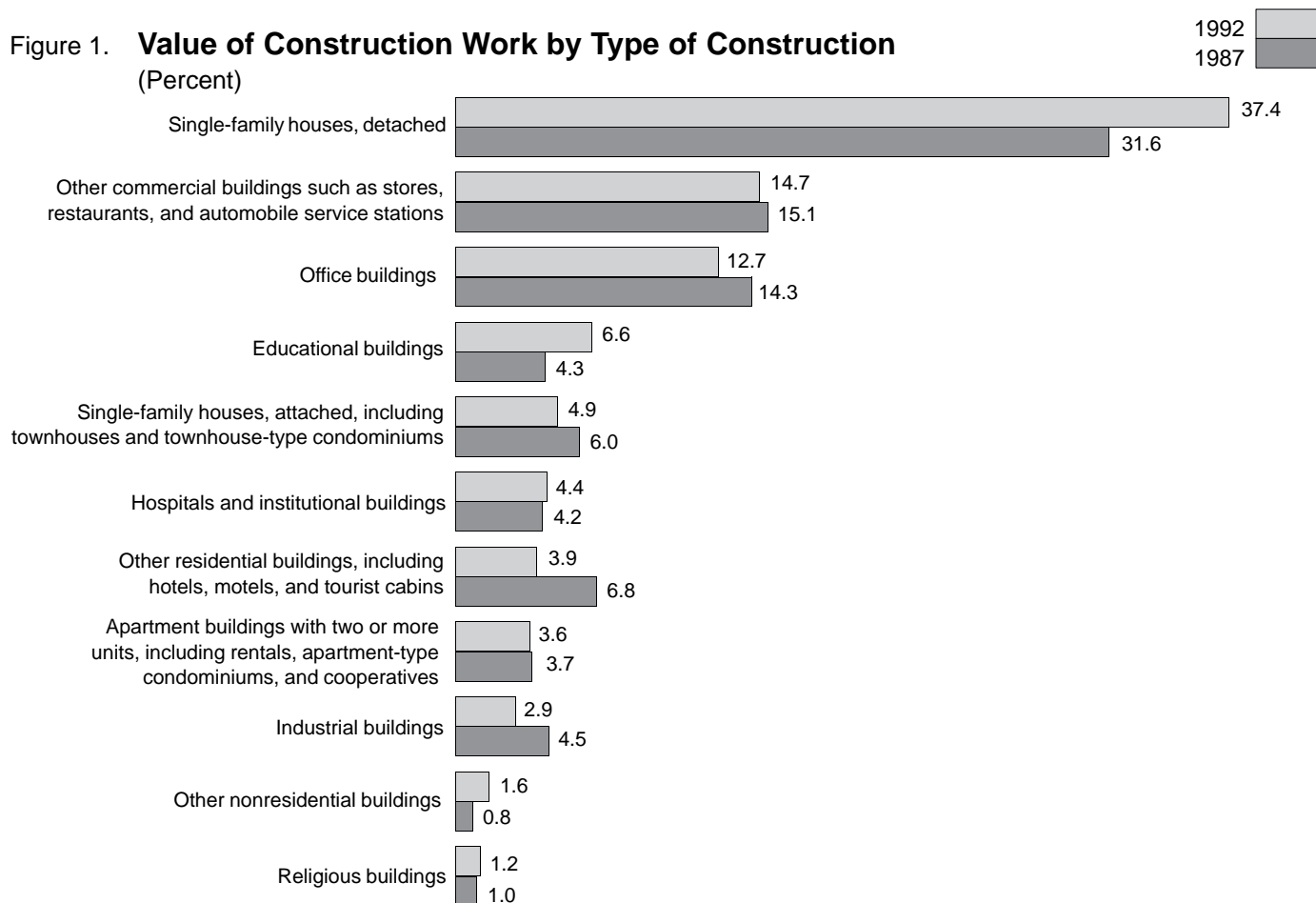


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

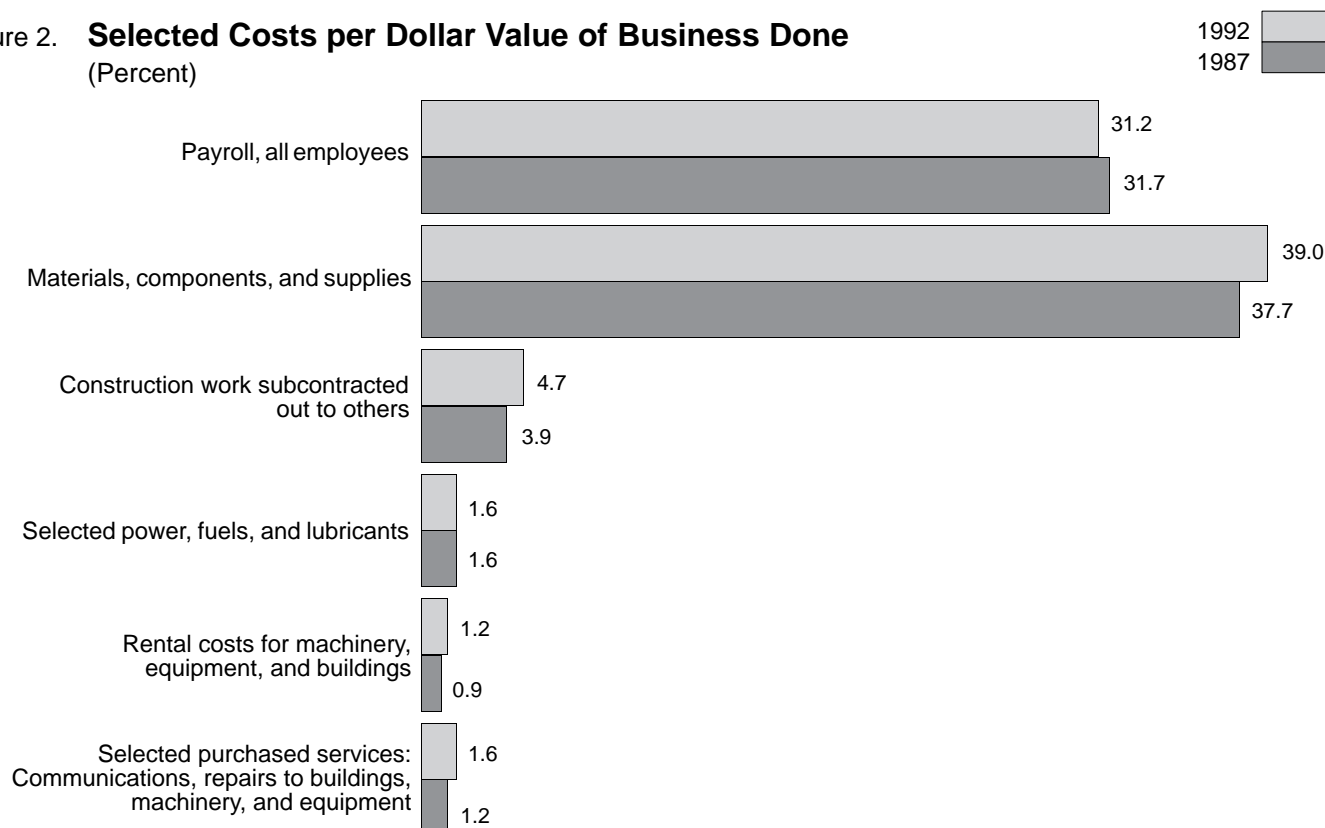


Table 1. **General Statistics for Establishments With Payroll by State: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	6 499	34 012	26 941	774 788	568 215	2 438 641	2 322 563	1 358 017	1 007 752
Alabama -----	105	672	545	11 777	7 778	35 646	35 377	22 371	15 645
Alaska -----	6	15	11	474	405	1 316	(D)	836	(D)
Arizona -----	159	724	590	11 781	9 430	37 797	35 504	21 393	14 492
Arkansas -----	34	156	112	2 257	1 626	*12 420	10 678	4 655	*6 544
California -----	1 435	7 868	6 330	188 236	139 936	573 716	556 765	333 910	227 659
Colorado -----	75	413	327	10 102	7 832	36 252	33 048	15 830	17 792
Connecticut -----	72	208	169	5 602	4 219	20 071	19 786	11 816	7 997
Delaware -----	19	51	41	1 418	935	3 849	3 770	2 216	1 554
District of Columbia -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	793	3 162	2 537	51 810	39 929	176 205	165 524	89 645	79 362
Georgia -----	164	1 021	825	20 127	15 204	74 139	68 147	36 759	(D)
Hawaii -----	40	341	280	11 138	7 902	35 545	34 296	21 800	12 763
Idaho -----	37	*122	*110	*1 802	*1 541	7 431	7 192	3 793	*3 445
Illinois -----	198	1 446	1 106	41 914	31 191	125 019	117 042	70 465	48 879
Indiana -----	64	603	503	13 031	9 826	36 273	34 951	19 964	15 052
Iowa -----	43	174	147	3 882	3 046	15 584	13 711	8 294	5 584
Kansas -----	28	179	157	4 148	3 155	12 841	12 751	7 547	5 231
Kentucky -----	65	295	240	6 986	4 764	22 228	21 861	12 937	8 937
Louisiana -----	71	481	373	7 967	5 855	25 375	23 962	12 751	11 892
Maine -----	6	(D)	11	*172	*111	*632	*632	*330	305
Maryland -----	119	684	535	18 381	13 031	44 952	44 164	26 788	17 674
Massachusetts -----	84	330	261	9 117	(S)	23 422	22 514	14 177	10 630
Michigan -----	141	636	499	15 748	11 738	47 702	45 906	25 752	20 317
Minnesota -----	110	706	515	18 854	12 379	58 538	56 149	33 516	26 346
Mississippi -----	21	101	83	(D)	(S)	(D)	(D)	(D)	(S)
Missouri -----	77	483	387	11 669	8 235	36 163	34 965	21 580	14 048
Montana -----	13	29	24	380	283	2 003	1 978	1 116	880
Nebraska -----	21	109	79	2 205	1 637	8 327	8 201	6 734	4 055
Nevada -----	67	653	542	16 733	12 923	46 808	43 859	23 798	20 154
New Hampshire -----	8	22	17	399	318	1 771	1 667	903	767
New Jersey -----	207	786	636	23 074	16 796	78 328	68 220	43 067	26 483
New Mexico -----	33	100	(S)	1 460	1 155	6 208	6 070	3 255	2 815
New York -----	454	2 438	1 766	68 978	49 198	215 374	203 555	125 818	80 672
North Carolina -----	184	835	647	17 521	12 171	59 749	53 586	29 533	24 188
North Dakota -----	4	(D)	13	(D)	(D)	1 061	(D)	571	(D)
Ohio -----	148	771	632	18 057	14 561	57 032	55 519	31 705	23 996
Oklahoma -----	46	231	174	4 610	3 117	14 887	14 582	9 348	(D)
Oregon -----	85	253	205	5 127	4 232	18 128	17 935	10 009	7 939
Pennsylvania -----	183	1 012	785	32 077	21 452	90 838	88 288	54 470	36 393
Rhode Island -----	40	87	72	1 494	1 249	6 626	6 341	3 552	2 891
South Carolina -----	88	367	313	6 185	4 854	18 988	18 377	11 325	7 715
South Dakota -----	*6	68	50	1 006	666	2 892	2 706	2 582	761
Tennessee -----	92	541	401	8 875	5 996	28 711	27 745	15 040	14 279
Texas -----	308	1 913	1 550	36 516	26 824	128 446	118 925	63 665	55 739
Utah -----	70	428	336	7 651	5 850	21 808	21 432	12 244	9 195
Vermont -----	*8	(D)	(D)	79	79	(D)	(D)	327	262
Virginia -----	194	1 133	889	20 471	13 884	66 424	63 977	34 548	30 351
Washington -----	162	762	590	18 193	12 907	56 313	54 354	29 205	26 793
West Virginia -----	7	37	28	529	384	1 621	1 565	930	(D)
Wisconsin -----	88	500	386	11 929	8 781	34 599	34 320	20 132	14 697
Wyoming -----	*17	29	22	503	343	1 845	1 804	1 077	767

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
116 078	1 909 362	30 363	27 446	283 791	34 420	2 271 593	1 317 632	2	1	7	U.S.
269	28 229	230	298	3 975	409	20 931	11 873	11	8	11	AL
(D)	1 249	5	(D)	(D)	(D)	4 331	*2 449	(Z)	(D)	(D)	AK
*2 292	36 853	680	678	3 744	1 083	46 945	28 549	9	8	32	AZ
(S)	4 833	79	*80	1 095	90	8 289	4 796	20	37	74	AR
16 951	526 914	8 646	6 113	76 101	7 465	529 857	319 898	3	2	15	CA
*3 204	19 219	257	179	2 132	200	14 605	8 385	13	12	34	CO
285	18 238	270	(S)	1 744	301	24 668	14 824	15	20	(S)	CT
*79	2 585	40	(S)	(S)	50	(D)	2 731	16	12	(S)	DE
(D)	(D)	—	—	(D)	(D)	(D)	(D)	(D)	(D)	—	DC
10 681	114 178	1 715	2 117	20 908	3 280	200 112	99 886	6	5	23	FL
(S)	43 718	572	537	4 711	827	47 297	25 821	12	17	25	GA
(S)	30 496	177	400	2 174	311	27 363	17 024	10	7	28	HI
239	*8 643	*99	*86	593	*93	4 462	*2 962	43	39	46	ID
7 977	87 274	1 773	868	10 513	1 278	98 316	60 057	5	4	18	IL
1 322	29 274	242	356	4 111	329	21 458	12 942	7	5	16	IN
1 872	8 727	51	*439	1 496	237	13 133	5 432	11	8	63	IA
90	3 933	*25	64	620	86	6 656	(D)	27	23	5	KS
367	18 408	159	231	2 181	185	14 344	8 245	8	8	2	KY
*1 413	15 591	165	660	3 661	272	13 001	7 609	19	20	39	LA
—	(D)	—	(D)	41	109	8 854	3 627	(D)	45	(D)	ME
788	32 644	1 052	175	2 270	768	56 068	34 026	11	8	30	MD
*908	12 441	223	(S)	(S)	577	44 310	26 321	16	12	(S)	MA
1 796	28 643	342	*1 058	5 706	798	58 700	34 610	11	9	73	MI
*2 389	44 771	*353	*658	4 722	641	51 529	36 086	9	10	47	MN
124	(S)	(D)	(S)	882	56	2 982	1 466	21	(D)	(S)	MS
1 198	26 788	*411	198	3 836	467	27 273	16 287	15	10	3	MO
(S)	1 850	7	20	378	(S)	(S)	(S)	(Z)	(Z)	(Z)	MT
*126	*10 164	*171	*297	2 650	75	4 502	3 034	27	25	53	NE
*2 949	40 938	552	(S)	3 229	267	17 105	10 403	11	10	(S)	NV
103	1 599	(S)	(S)	58	124	8 474	4 794	4	7	(S)	NH
(S)	61 492	1 410	943	8 666	1 763	122 814	73 709	9	8	33	NJ
138	5 986	48	(S)	472	143	7 783	5 041	22	7	(S)	NM
11 819	150 197	3 127	2 466	34 871	2 441	158 356	99 354	8	7	30	NY
6 163	53 060	799	559	6 341	1 086	65 373	33 913	4	4	23	NC
(D)	1 018	(D)	(D)	(D)	7	510	233	(D)	(D)	(D)	ND
1 513	37 783	478	555	5 723	720	63 198	33 590	10	10	21	OH
305	11 255	55	68	2 525	150	9 105	4 955	15	15	(Z)	OK
*193	16 962	*559	*569	2 203	(S)	(S)	(S)	14	20	58	OR
2 550	66 194	875	869	12 594	976	76 729	43 035	7	6	23	PA
(S)	2 645	32	15	615	106	8 102	4 789	19	17	(Z)	RI
612	14 051	264	173	2 635	604	28 996	17 436	10	13	(Z)	SC
186	2 603	85	28	152	(D)	(D)	(D)	36	23	25	SD
(S)	26 248	*487	287	3 151	743	35 730	20 423	9	10	20	TN
9 521	113 143	1 395	1 968	19 067	2 241	124 339	69 729	6	6	33	TX
377	17 054	254	201	(S)	258	15 734	7 829	7	7	24	UT
91	511	24	*6	47	(D)	(D)	(D)	(D)	(D)	58	VT
2 446	51 105	1 128	*665	5 976	1 495	73 017	39 531	10	7	46	VA
1 959	38 528	541	520	4 590	388	37 573	18 875	11	11	26	WA
56	136	*60	21	*267	39	3 165	2 023	22	21	14	WV
(S)	31 832	277	854	4 144	359	27 262	14 426	13	8	26	WI
*41	*1 761	*32	51	345	(D)	840	420	27	29	30	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	6 499	5 089	3 890	3 891	2	2	3	3
Proprietors and working partners	3 175	1 659	1 760	2 433	3	6	5	5
All employees**	34 012	34 420	25 434	22 324	2	1	2	2
Construction workers:								
March	26 602	26 761	20 333	17 921	2	1	2	2
May	27 696	28 033	21 557	19 383	2	1	2	2
August	28 066	29 017	22 215	19 857	2	1	2	2
November	25 403	27 822	21 226	19 092	2	1	2	2
Average	26 941	27 908	21 695	19 084	2	1	2	2
Other employees:								
March	6 798	6 261	3 730	3 151	2	2	2	2
May	6 762	6 251	(NA)	(NA)	2	2	(NA)	(NA)
August	7 126	6 720	(NA)	(NA)	2	2	(NA)	(NA)
November	7 595	6 812	(NA)	(NA)	2	2	(NA)	(NA)
Average	7 070	6 511	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	774 788	733 959	383 985	255 475	1	1	1	1
Payroll, construction workers	568 215	554 150	306 334	207 643	1	1	1	1
Payroll, other employees	206 573	179 808	77 651	47 832	2	2	1	1
First-quarter payroll, all employees	184 144	163 456	86 668	55 474	2	2	2	1
Fringe benefits, all employees	183 744	156 266	69 322	45 180	2	2	2	1
Legally required expenditures	131 427	115 855	55 396	26 220	2	2	2	1
Voluntary expenditures	52 317	40 410	13 926	18 960	2	2	3	1
Dollar value of business done	2 481 847	2 315 715	1 210 867	788 747	2	2	2	1
Value of construction work	2 438 641	2 271 593	1 190 627	766 114	2	2	2	1
Value of construction work subcontracted in from others	1 909 362	1 317 188	692 416	534 006	2	2	3	2
Other business receipts	43 206	44 121	20 240	22 633	7	7	7	3
Net value of construction work†	2 322 563	2 181 972	1 158 013	750 078	1	1	1	1
Value added††	1 358 017	1 317 632	666 031	443 049	2	1	2	1
Selected costs	1 123 830	998 082	544 836	345 698	2	2	2	2
Materials, components, and supplies	966 979	871 938	487 683	315 856	2	2	2	2
Construction work subcontracted out to others	116 078	89 620	32 614	16 036	6	7	4	8
Selected power, fuels, and lubricants	40 773	36 522	24 538	13 806	2	2	3	2
Electricity	6 509	5 156	3 140	1 487	3	3	5	3
Natural and manufactured gas	1 996	1 129	953	514	6	6	9	5
Gasoline and diesel fuel	30 975	27 720	18 900	10 589	3	2	3	2
On highway use	28 761	25 953	(NA)	(NA)	3	2	(NA)	(NA)
Off highway use	2 214	1 766	(NA)	(NA)	9	8	(NA)	(NA)
Other, including lubricating oils and greases	1 293	2 516	1 544	1 218	12	5	6	6
Rental cost for machinery, equipment, and buildings	30 363	21 061	9 349	4 527	4	4	3	2
For machinery and equipment	7 226	4 955	3 609	1 684	5	6	6	3
For buildings	23 137	16 106	5 739	2 843	5	4	5	3
Selected purchased services	38 709	26 924	15 324	13 572	3	3	3	3
Communication services	18 508	13 343	7 429	5 850	3	4	3	2
Repairs to buildings and other structures	2 310	2 104	1 070	734	9	7	6	5
Repairs to machinery and equipment	17 891	11 476	6 824	6 989	4	5	4	5
Ownership of construction projects:								
Value of construction work	2 438 641	2 271 593	1 190 627	766 114	2	2	2	1
Government owned	352 926	209 514	116 546	108 388	4	4	12	2
Federal	93 084	71 588	(NA)	(NA)	6	7	(NA)	(NA)
State and local	259 842	137 925	(NA)	(NA)	5	4	(NA)	(NA)
Privately owned	2 085 715	2 062 079	1 074 080	657 727	2	2	2	2

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	265 918	169 844	4	3
Capital expenditures, other than land -----	27 446	37 611	7	8
New -----	22 753	29 948	8	8
Used -----	4 693	7 662	14	11
Retirements and disposition of depreciable assets -----	9 573	6 274	9	9
End-of-year gross book value of depreciable assets -----	283 791	201 181	4	3
Depreciation charges during year -----	32 420	23 369	8	4
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	64 446	55 019	10	5
Capital expenditures, other than land -----	3 902	8 009	17	26
New buildings and other structures -----	2 313	4 670	19	37
Used buildings and other structures -----	(S)	3 338	(S)	20
Retirements and disposition of depreciable assets -----	761	904	24	33
End-of-year gross book value of depreciable assets -----	67 587	62 124	9	6
Depreciation charges during year -----	4 691	4 454	11	6
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	201 472	114 824	4	3
Capital expenditures, other than land -----	23 543	29 602	7	6
New machinery and equipment, including automobiles and trucks -----	20 439	25 278	8	6
New automobiles and trucks, intended primarily for highway use -----	12 514	19 045	11	6
Used machinery and equipment, including automobiles and trucks -----	3 104	4 324	13	13
Retirements and disposition of depreciable assets -----	8 812	5 370	9	8
End-of-year gross book value of depreciable assets -----	216 204	139 057	4	3
Depreciation charges during year -----	27 729	18 914	9	4

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	6 499	2
Value of construction work	2 438 641	2
Establishments with inventories:		
Number	1 498	3
Value of construction work	1 216 307	2
Inventories ¹ :		
End of 1992, materials and supplies	46 292	4
End of 1991, materials and supplies	43 296	5
Establishments with no inventories:		
Number	2 555	3
Value of construction work	750 658	3
Establishments not reporting:		
Number	2 446	3
Value of construction work	471 676	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	6 499	4 609	999	588	242	49	12	—	—	—
All employees** -----	34 012	7 830	6 521	7 622	7 144	3 266	1 629	—	—	—
Payroll, all employees -----	774 788	121 624	133 722	180 170	203 424	98 699	37 148	—	—	—
Dollar value of business done -----	2 481 847	578 852	432 004	542 179	550 567	282 995	95 250	—	—	—
Value of construction work -----	2 438 641	572 385	427 081	531 872	535 471	276 933	94 899	—	—	—
Net value of construction work† -----	2 322 563	539 777	406 632	503 881	517 284	<u>354 989</u>	(D)	—	—	—
Value added†† -----	1 358 017	298 198	234 168	302 329	303 525	164 991	54 806	—	—	—
Cost of materials, components, supplies, and fuels -----	1 007 752	248 046	177 387	211 859	228 855	<u>141 605</u>	(D)	—	—	—
Cost of construction work subcontracted out to others -----	116 078	32 608	20 449	27 991	18 187	<u>16 843</u>	(D)	—	—	—
Rental cost for machinery, equipment, and buildings -----	30 363	4 608	5 915	8 286	6 593	<u>3 868</u>	1 092	—	—	—
Capital expenditures, other than land -----	27 446	8 534	5 026	6 595	4 298	<u>2 160</u>	833	—	—	—
End-of-year gross book value of depreciable assets -----	283 791	70 041	51 271	66 343	62 967	24 858	8 311	—	—	—
1987										
All employees** -----	34 420	6 453	5 752	6 389	7 850	4 853	1 938	1 183	—	—
Value of construction work -----	2 271 593	462 607	346 477	399 545	525 968	336 454	<u>200 540</u>	(D)	—	—
Value added†† -----	1 317 632	238 477	193 659	237 170	312 348	211 632	<u>82 979</u>	41 365	—	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	2	4	6	5	2	(Z)	(Z)	—	—	—
Net value of construction work† -----	1	4	6	5	2	(Z)	(D)	—	—	—
Capital expenditures, other than land -----	7	15	17	13	1	(Z)	(Z)	—	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	6 499	(S)	(S)	(S)	2 100	933	655	354	100	36	9
All employees** -----	34 012	(S)	(S)	(S)	5 124	5 356	6 308	6 972	3 988	2 508	1 028
Payroll, all employees -----	774 788	(S)	(S)	(S)	80 001	101 040	143 273	183 776	122 305	81 031	34 676
Dollar value of business done -----	2 481 847	(S)	(S)	(S)	332 437	328 883	459 611	548 474	338 098	231 659	116 044
Value of construction work -----	2 438 641	(S)	(S)	(S)	328 527	324 376	451 989	538 609	327 624	225 799	115 784
Net value of construction work† -----	2 322 563	(S)	(S)	(S)	315 400	312 449	431 292	507 028	315 680	215 053	103 408
Value added†† -----	1 358 017	(S)	(S)	(S)	175 888	187 380	249 263	290 132	190 477	132 291	61 846
Cost of materials, components, supplies, and fuels -----	1 007 752	(S)	(S)	(S)	143 422	129 577	189 651	226 761	135 677	88 622	41 822
Cost of construction work subcontracted out to others -----	116 078	(S)	(S)	(S)	13 127	11 926	20 697	31 582	11 945	10 746	12 376
Rental cost for machinery, equipment, and buildings -----	30 363	(S)	(S)	(S)	2 921	3 547	6 830	7 267	4 571	2 551	1 705
Capital expenditures, other than land -----	27 446	(S)	(S)	(S)	5 737	2 857	5 789	5 271	3 451	2 023	382
End-of-year gross book value of depreciable assets -----	283 791	(S)	(S)	(S)	44 018	30 643	61 010	60 164	42 113	20 451	6 710
1987											
All employees** -----	34 420	(S)	(S)	(S)	4 662	4 483	5 667	7 566	4 546	3 376	1 957
Value of construction work -----	2 271 593	(S)	(S)	(S)	244 029	286 134	376 455	528 605	320 367	421 417	(D)
Value added†† -----	1 317 632	(S)	(S)	(S)	136 157	158 980	205 311	312 097	190 108	156 010	108 298
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	(S)	(S)	(S)	5	7	6	3	1	(Z)	(Z)
Net value of construction work† -----	1	(S)	(S)	(S)	5	6	6	4	1	(Z)	(Z)
Capital expenditures, other than land -----	7	(S)	(S)	(S)	22	14	15	8	17	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

15—8 TERRAZZO, TILE, MARBLE, AND MOSAIC WORK

CONSTRUCTION—INDUSTRY SERIES

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	2 438 641	1 518 882	631 976	202 673	2	2	2	5
Building construction	2 319 806	1 494 663	626 724	198 419	2	2	2	5
Single-family houses	1 031 109	727 155	236 431	67 523	2	3	4	6
Single-family houses, detached	912 491	644 965	210 450	57 076	3	3	4	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	118 618	82 190	25 981	10 447	5	6	10	9
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	88 452	47 172	25 213	*16 067	11	5	17	53
Other residential buildings, including hotels, motels, and tourist cabins	94 749	66 328	21 988	6 433	16	23	10	8
Office buildings	309 493	169 999	95 667	43 827	3	3	5	5
Other commercial buildings such as stores, restaurants, and automobile service stations	357 414	213 236	118 858	25 320	3	4	4	8
Industrial buildings and warehouses	85 068	47 873	21 803	15 392	5	4	8	15
Industrial buildings	71 657	39 042	19 228	13 387	5	3	9	17
Warehouses	13 411	8 831	2 575	(S)	13	12	19	(S)
Religious buildings	29 068	16 973	9 335	2 760	4	4	10	12
Educational buildings	160 643	106 246	44 092	10 306	3	4	6	13
Hospitals and institutional buildings	108 130	64 793	35 633	7 704	4	5	5	6
Amusement, social, and recreational buildings, indoors	17 553	12 866	3 551	1 135	5	6	10	22
Other nonresidential buildings	38 127	22 022	14 151	1 954	12	11	19	34
Nonbuilding construction	33 725	24 219	5 252	4 254	11	12	17	34
Outdoor swimming pools	22 345	18 357	2 707	1 282	16	16	34	24
Other nonbuilding construction	11 380	5 862	2 546	*2 972	13	6	1	48
Construction work, n.s.k.	85 109	(NA)	(NA)	(NA)	8	(NA)	(NA)	(NA)
1987								
Value of construction work	2 271 593	1 617 836	404 028	153 338	2	2	3	5
Building construction	2 131 122	1 581 099	400 274	149 749	2	2	3	4
Single-family houses	852 862	646 826	152 380	53 654	3	3	5	7
Single-family houses, detached	717 487	533 409	140 320	43 757	3	3	5	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	135 375	113 417	12 060	9 897	7	8	10	14
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	83 047	60 872	12 694	9 480	8	9	13	12
Other residential buildings, including hotels, motels, and tourist cabins	155 175	120 562	23 599	11 012	3	4	7	16
Office buildings	325 723	265 445	42 365	17 912	2	2	4	6
Other commercial buildings such as stores, restaurants, and automobile service stations	342 216	249 726	74 106	18 383	4	5	5	7
Industrial buildings and warehouses	113 849	76 883	24 646	12 319	3	4	5	7
Industrial buildings	101 479	67 703	21 652	12 123	4	4	6	7
Warehouses	12 369	9 180	2 993	196	4	6	(Z)	(Z)
Religious buildings	23 470	15 039	5 466	2 965	6	8	8	12
Educational buildings	98 497	65 352	21 366	11 777	5	6	8	13
Hospitals and institutional buildings	94 553	50 101	35 399	9 053	4	3	7	6
Amusement, social, and recreational buildings, indoors	22 944	17 238	3 614	2 091	4	5	7	4
Other nonresidential buildings	18 786	13 055	4 639	*1 103	23	23	34	44
Nonbuilding construction	44 080	36 737	3 753	3 589	11	12	12	2
Outdoor swimming pools	30 411	27 868	1 804	738	16	16	24	7
Other nonbuilding construction	13 669	8 869	1 949	2 851	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	96 390	(NA)	(NA)	(NA)	11	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work subcontracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
All establishments -----	6 499	34 012	774 788	2 438 641	1 387 553	2 322 563	1 358 017	116 078	2	2	6
Establishments not specializing by type -----	1 151	10 996	271 362	807 859	(NA)	772 811	455 443	35 049	3	2	9
Establishments specializing 51 percent or more -----	5 348	23 015	503 426	1 630 782	1 387 553	1 549 752	902 574	81 030	2	2	8
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	3 650	13 237	262 839	879 736	763 588	838 871	484 214	40 865	3	3	9
Establishments with —											
100 percent specialization -----	1 724	4 606	79 615	299 211	299 211	286 185	161 995	13 026	6	6	15
90 to 99 percent specialization -----	758	2 938	58 798	200 097	187 138	190 809	108 914	9 288	7	7	21
80 to 89 percent specialization -----	427	2 066	44 549	139 706	114 386	130 366	74 722	9 340	10	9	23
70 to 79 percent specialization -----	450	2 220	48 574	141 082	102 514	137 340	85 613	3 742	8	7	21
60 to 69 percent specialization -----	234	1 125	24 682	79 528	49 368	74 746	41 052	4 782	12	10	14
51 to 59 percent specialization -----	57	282	6 621	20 111	10 971	19 425	11 918	*686	13	14	53
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	209	639	12 294	37 967	34 206	36 228	18 921	1 739	17	15	30
Establishments with —											
100 percent specialization -----	151	356	6 933	22 318	22 318	20 871	10 891	1 447	18	18	36
90 to 99 percent specialization -----	*14	(S)	(S)	*2 670	*2 563	*2 646	*875	(S)	(S)	66	(S)
80 to 89 percent specialization -----	*9	*51	*1 146	*3 594	*2 979	*3 573	*1 597	(S)	55	54	(S)
70 to 79 percent specialization -----	(S)	*161	*3 263	*7 702	*5 404	*7 455	*4 523	*247	41	40	50
60 to 69 percent specialization -----	—	—	—	—	—	—	—	—	—	—	—
51 to 59 percent specialization -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	(S)	(S)	—
OFFICE BUILDINGS											
All establishments specializing in type -----	118	2 238	68 720	194 671	155 405	184 390	111 158	10 282	5	4	14
Establishments with —											
100 percent specialization -----	21	471	12 529	31 892	31 892	29 511	18 630	*2 381	14	14	57
90 to 99 percent specialization -----	24	549	18 305	44 481	41 673	44 035	28 095	446	1	1	(Z)
80 to 89 percent specialization -----	24	401	12 458	39 136	31 725	37 305	21 827	1 830	20	13	5
70 to 79 percent specialization -----	(S)	196	5 860	28 106	20 289	(D)	13 051	(D)	18	13	(D)
60 to 69 percent specialization -----	(S)	248	10 253	25 063	15 415	24 720	13 183	*343	11	7	53
51 to 59 percent specialization -----	10	373	9 315	25 994	14 413	(D)	16 372	(D)	6	13	(D)
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	358	2 566	60 255	200 083	162 665	189 024	102 407	11 059	6	6	17
Establishments with —											
100 percent specialization -----	132	691	14 439	51 143	51 143	49 572	28 289	*1 570	15	13	44
90 to 99 percent specialization -----	63	279	6 603	21 504	20 534	(D)	12 458	(D)	24	26	(D)
80 to 89 percent specialization -----	42	509	14 335	38 555	31 765	37 706	21 561	849	7	5	12
70 to 79 percent specialization -----	41	523	11 280	35 754	25 922	32 666	15 506	*3 088	15	15	57
60 to 69 percent specialization -----	64	538	13 137	50 672	31 950	(D)	23 039	(D)	10	7	(D)
51 to 59 percent specialization -----	*16	26	461	2 455	1 350	2 434	*1 554	*21	29	39	71
EDUCATIONAL BUILDINGS											
All establishments specializing in type -----	85	1 012	27 242	68 604	48 002	67 268	42 350	1 336	9	8	30
Establishments with —											
100 percent specialization -----	*7	*23	*229	*1 145	*1 145	(D)	*455	(D)	57	63	(D)
90 to 99 percent specialization -----	*16	77	2 522	7 757	7 245	7 226	4 370	*531	23	26	70
80 to 89 percent specialization -----	12	(S)	(S)	(S)	(S)	(D)	(S)	(D)	(S)	(S)	(D)
70 to 79 percent specialization -----	(S)	(S)	5 781	(S)	(S)	(S)	8 795	251	(S)	(S)	18
60 to 69 percent specialization -----	20	395	11 910	24 833	15 561	24 586	16 404	247	12	12	21
51 to 59 percent specialization -----	12	158	3 534	12 341	6 779	12 121	6 889	*220	25	20	62

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	6 499	26 941	26 602	27 696	28 066	25 403	2	2	2	2	2	2
Alabama	105	545	586	536	552	506	14	12	14	10	17	10
Alaska	6	11	11	12	10	12	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Arizona	159	590	605	594	622	538	11	10	13	10	13	8
Arkansas	34	112	116	113	105	114	26	19	19	19	21	19
California	1 435	6 330	6 335	6 695	6 418	5 872	3	3	3	3	3	3
Colorado	75	327	296	304	365	343	22	12	11	11	15	12
Connecticut	72	169	158	172	199	147	17	16	17	16	15	16
Delaware	19	41	40	41	42	39	30	14	14	14	14	15
District of Columbia	2	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
Florida	793	2 537	2 586	2 565	2 537	2 458	5	6	7	6	7	6
Georgia	164	825	778	838	903	780	10	12	12	12	12	13
Hawaii	40	280	251	300	311	256	21	9	8	9	8	9
Idaho	37	*110	81	*135	*112	*113	22	44	32	49	41	46
Illinois	198	1 106	1 104	1 099	1 155	1 066	11	5	5	5	6	5
Indiana	64	503	468	497	564	481	10	6	5	5	7	7
Iowa	43	147	137	147	149	156	25	13	13	12	14	12
Kansas	28	157	153	158	168	151	29	30	30	30	28	31
Kentucky	65	240	217	228	255	258	16	8	7	6	9	12
Louisiana	71	373	399	368	365	361	11	21	23	21	18	20
Maine	6	11	*10	11	11	*10	24	39	42	39	39	42
Maryland	119	535	616	574	504	444	12	11	10	11	12	13
Massachusetts	84	261	258	271	273	241	19	16	15	15	15	15
Michigan	141	499	496	512	530	458	10	10	10	9	11	11
Minnesota	110	515	506	555	564	438	16	9	9	10	10	10
Mississippi	21	83	(S)	91	77	(S)	17	21	(S)	19	23	(S)
Missouri	77	387	384	376	444	346	10	16	13	21	21	16
Montana	13	24	23	30	21	22	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Nebraska	21	79	81	72	85	79	30	25	29	24	23	25
Nevada	67	542	512	514	591	553	4	12	12	12	13	14
New Hampshire	8	17	(S)	14	(S)	16	13	6	(S)	(Z)	(S)	(Z)
New Jersey	207	636	572	641	683	648	10	9	9	9	8	9
New Mexico	33	(S)	(S)	75	(S)	54	23	(S)	(S)	20	(S)	(Z)
New York	454	1 766	1 777	1 877	1 817	1 592	8	8	7	8	8	8
North Carolina	184	647	712	618	645	614	8	5	10	4	4	4
North Dakota	4	13	(D)	14	(D)	13	(Z)	(Z)	(D)	(Z)	(D)	(Z)
Ohio	148	632	546	630	759	595	11	10	10	9	14	10
Oklahoma	46	174	171	150	169	206	13	16	15	16	18	17
Oregon	85	205	200	209	224	188	15	14	15	13	14	17
Pennsylvania	183	785	734	774	883	750	10	6	7	6	6	6
Rhode Island	40	72	65	77	73	71	26	23	16	30	32	23
South Carolina	88	313	300	407	283	262	19	11	11	10	11	11
South Dakota	*6	50	*59	*51	48	43	58	35	47	41	29	24
Tennessee	92	401	405	402	398	400	13	9	10	10	10	10
Texas	308	1 550	1 473	1 547	1 668	1 510	5	5	5	6	6	6
Utah	70	336	328	328	349	340	12	9	8	8	10	11
Vermont	*8	(D)	(D)	(D)	8	(D)	43	(D)	(D)	(D)	(Z)	(D)
Virginia	194	889	863	954	898	840	11	10	9	12	10	9
Washington	162	590	574	702	591	492	13	12	11	16	10	9
West Virginia	7	28	25	28	28	29	22	24	26	24	24	23
Wisconsin	88	386	363	352	423	403	11	12	11	12	14	9
Wyoming	*17	22	*26	*30	17	13	46	36	58	51	14	(Z)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	2 438 641	6 481	2 263 891	1 066	174 750	2 271 593	7.4	2	1	9
Alabama -----	31 351	105	30 111	14	1 241	19 069	64.4	7	7	38
Alaska -----	(D)	6	(D)	2	(D)	*5 536	(D)	(D)	(D)	(D)
Arizona -----	38 619	159	37 219	8	1 400	49 082	-21.3	9	9	(Z)
Arkansas -----	*12 664	34	*12 124	10	540	8 710	45.4	43	44	21
California -----	585 370	1 435	572 091	37	13 279	533 007	9.8	2	3	8
Colorado -----	48 721	75	30 888	*22	(S)	15 591	212.5	32	11	(S)
Connecticut -----	25 086	72	19 243	42	*5 842	24 685	1.6	20	20	54
Delaware -----	4 769	19	3 701	11	1 068	5 198	-8.2	10	12	5
District of Columbia -----	14 209	2	(D)	29	(D)	15 283	-7.0	12	(D)	(D)
Florida -----	180 426	793	175 185	54	5 241	206 982	-12.8	5	6	19
Georgia -----	58 834	156	54 341	29	4 492	46 622	26.2	10	11	13
Hawaii -----	40 769	40	35 545	6	5 224	27 440	48.6	8	9	(Z)
Idaho -----	8 535	37	7 265	9	1 270	*3 571	139.0	33	39	4
Illinois -----	128 320	198	120 358	26	7 962	97 234	32.0	4	5	1
Indiana -----	35 264	59	32 670	33	2 594	21 136	66.8	4	4	5
Iowa -----	9 052	(S)	8 640	9	412	7 386	22.6	14	15	(Z)
Kansas -----	16 496	27	10 696	20	5 800	7 358	124.2	18	28	1
Kentucky -----	23 444	65	20 455	44	2 990	14 213	65.0	8	9	16
Louisiana -----	24 654	71	23 996	11	658	14 121	74.6	20	21	34
Maine -----	772	6	*632	*7	*140	8 941	-91.4	38	45	50
Maryland -----	48 130	119	31 521	34	16 609	48 076	.1	8	11	13
Massachusetts -----	23 664	84	21 849	25	1 815	46 160	-48.7	12	13	16
Michigan -----	51 516	141	47 702	28	3 814	58 799	-12.4	9	9	6
Minnesota -----	55 992	110	53 746	16	2 246	50 897	10.0	12	12	6
Mississippi -----	8 022	21	(D)	31	(D)	3 568	124.8	14	(D)	(D)
Missouri -----	29 245	77	26 654	*16	2 591	25 794	13.4	12	13	28
Montana -----	2 029	(S)	1 982	*5	*48	2 445	-17.0	1	(Z)	56
Nebraska -----	8 294	21	8 115	5	179	6 401	29.6	26	27	(Z)
Nevada -----	46 334	67	45 466	*14	*868	15 406	200.8	11	11	47
New Hampshire -----	1 999	8	(S)	*17	406	8 577	-76.7	8	(S)	26
New Jersey -----	78 291	207	71 431	48	6 861	126 188	-38.0	6	6	20
New Mexico -----	4 294	(S)	4 135	*9	159	7 600	-43.5	10	10	30
New York -----	214 368	451	207 396	45	6 972	164 044	30.7	7	8	39
North Carolina -----	46 941	184	45 016	34	1 925	58 497	-19.8	5	6	14
North Dakota -----	(D)	4	(D)	1	(D)	504	(D)	(D)	(D)	(D)
Ohio -----	55 261	148	52 158	22	*3 103	53 328	3.6	10	11	43
Oklahoma -----	9 642	44	(D)	*4	(D)	12 409	-22.3	4	(D)	(D)
Oregon -----	19 680	85	17 836	22	1 844	25 371	-22.4	18	20	6
Pennsylvania -----	80 783	(S)	76 166	38	4 617	67 255	20.1	8	8	4
Rhode Island -----	6 562	(S)	6 067	*13	495	7 008	-6.4	19	20	24
South Carolina -----	22 329	88	17 928	44	4 401	29 437	-24.1	11	13	7
South Dakota -----	3 005	*6	2 624	5	382	(D)	(D)	21	24	2
Tennessee -----	28 591	92	27 076	28	1 515	36 367	-21.4	9	9	10
Texas -----	130 283	308	126 503	20	3 779	121 361	7.4	7	7	18
Utah -----	19 040	(S)	19 040	-	-	12 709	49.8	9	9	-
Vermont -----	1 186	8	(D)	6	(D)	(D)	(D)	10	(D)	(D)
Virginia -----	64 727	194	54 798	47	9 929	86 332	-25.0	7	8	5
Washington -----	54 169	162	52 219	29	1 950	37 699	43.7	11	11	9
West Virginia -----	2 192	7	1 561	9	631	3 924	-44.1	16	21	18
Wisconsin -----	29 587	88	28 448	12	1 139	21 133	40.0	9	9	21
Wyoming -----	2 630	*17	1 279	*19	*1 351	995	164.3	32	7	61

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	2 481 847	2 315 715	2	2
SPECIAL TRADE CONTRACTORS				
Carpet laying or removal contractor	19 184	(NA)	7	(NA)
Linoleum, asphalt resilient or vinyl tile installation contractor	24 127	9 629	7	13
Marble contractor, exterior	46 401	41 558	7	6
Marble contractor, interior	469 056	280 967	5	4
Special cases	38 799	(NA)	17	(NA)
Stonework contractor	21 125	11 054	3	6
Terrazzo contractor	148 510	123 781	5	5
Tile setting contractor	1 608 440	1 685 847	2	2
Other construction activities	48 354	84 986	8	(NA)
OTHER BUSINESS ACTIVITIES				
Retail trade	20 764	23 541	13	7
Other business activities	21 774	18 462	4	(NA)
Kind of business activity, n.s.k.	15 313	35 890	19	12

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	5.2	6.8	1
Number of construction workers	4.1	5.5	1
Number of all other employees	1.1	1.3	2
Payroll, all employees \$1,000 ..	119.2	144.2	1
Payroll, construction workers do ..	87.4	108.9	1
Payroll, other employees do ..	31.8	35.3	2
Dollar value of business done do ..	381.9	455.0	1
Value of construction work do ..	375.2	446.4	1
Cost of materials, components, supplies, and fuels do ..	155.1	178.5	2
Construction work subcontracted to others do ..	17.9	17.6	6
Rental cost for machinery, equipment, and buildings do ..	4.7	4.1	4
Capital expenditures, other than land do ..	4.2	7.4	7
Gross book value of depreciable assets do ..	43.7	39.5	4
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	22.8	21.3	1
Dollar value of business done do ..	73.0	67.3	1
Value added†† do ..	39.9	38.3	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	21.1	19.9	1
Value of construction work do ..	90.5	81.4	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	29.2	27.6	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.318	.323	1
Cost of materials, components, supplies, and fuels do ..	.413	.400	1
Cost of construction work subcontracted out to others do ..	.048	.039	6
Value of construction work subcontracted in from others do ..	.783	.580	2
Rental cost for machinery, equipment, and buildings do ..	.012	.009	4

Table 13. **Selected Industry Ratios for Establishments With Payroll by State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	5.2	22.8	90.5	.318	.413	.048	.783	.012
Alabama -----	6.4	17.5	65.4	.330	.439	.008	.792	.006
Alaska -----	2.5	31.6	119.6	.360	(D)	(D)	.949	.004
Arizona -----	4.5	16.3	64.1	.312	.383	*.061	(S)	.018
Arkansas -----	4.6	14.5	110.9	.182	.527	*.140	*.389	*.006
California -----	5.5	23.9	90.6	.328	.397	.030	.918	.015
Colorado -----	5.5	24.5	110.9	.279	.491	*.088	.530	.007
Connecticut -----	2.9	26.9	118.8	.279	.398	.014	.909	.013
Delaware -----	2.7	27.8	93.9	.368	.404	*.021	.672	.010
District of Columbia -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	4.0	16.4	69.5	.294	.450	.061	.648	.010
Georgia -----	6.2	19.7	89.9	.271	(D)	*.081	.590	.008
Hawaii -----	8.6	32.7	126.9	.313	.359	*.035	.858	.005
Idaho -----	3.3	14.8	67.6	.242	.464	.032	(S)	.013
Illinois -----	7.3	29.0	113.0	.335	.391	.064	.698	.014
Indiana -----	9.5	21.6	72.1	.359	.415	.036	.807	.007
Iowa -----	4.0	22.3	106.0	.249	.358	.120	.560	.003
Kansas -----	6.5	23.2	81.8	.323	.407	.007	.306	*.002
Kentucky -----	4.5	23.7	92.6	.314	.402	.017	.828	.007
Louisiana -----	6.8	16.6	68.0	.314	.469	.056	.614	.006
Maine -----	(D)	(D)	57.5	.272	.483	—	(D)	—
Maryland -----	5.8	26.9	84.0	.409	.393	.018	.726	.023
Massachusetts -----	3.9	27.6	89.7	.389	.454	.039	.531	.010
Michigan -----	4.5	24.8	95.6	.330	.426	.038	.600	.007
Minnesota -----	6.4	26.7	113.7	.322	.450	.041	.765	*.006
Mississippi -----	4.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri -----	6.3	24.2	93.4	.323	.388	.033	.741	*.011
Montana -----	2.2	13.1	83.5	.190	.439	(S)	.924	.003
Nebraska -----	5.3	20.2	105.4	.265	.487	*.015	(S)	.021
Nevada -----	9.8	25.6	86.4	.357	.431	*.063	.875	.012
New Hampshire -----	2.9	18.1	104.2	.225	.433	.058	.903	(S)
New Jersey -----	3.8	29.4	123.2	.295	.338	(S)	.785	.018
New Mexico -----	3.0	14.6	(S)	.235	.453	.022	.964	.008
New York -----	5.4	28.3	122.0	.320	.375	.055	.697	.015
North Carolina -----	4.5	21.0	92.3	.293	.405	.103	.888	.013
North Dakota -----	(D)	(D)	81.6	(D)	(D)	(D)	.959	(D)
Ohio -----	5.2	23.4	90.2	.317	.421	.027	.662	.008
Oklahoma -----	5.1	20.0	85.6	.310	(D)	.020	.756	.004
Oregon -----	3.0	20.3	88.4	.283	.438	*.011	.936	*.031
Pennsylvania -----	5.5	31.7	115.7	.353	.401	.028	.729	.010
Rhode Island -----	2.2	17.2	92.0	.225	.436	(S)	.399	.005
South Carolina -----	4.2	16.9	60.7	.326	.406	.032	.740	.014
South Dakota -----	11.3	14.8	57.8	.348	.263	.064	.900	.029
Tennessee -----	5.9	16.4	71.6	.309	.497	(S)	.914	.017
Texas -----	6.2	19.1	82.9	.284	.434	.074	.881	.011
Utah -----	6.2	17.9	64.9	.351	.422	.017	.782	.012
Vermont -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia -----	5.8	18.1	74.7	.308	.457	.037	.769	.017
Washington -----	4.7	23.9	95.4	.323	.476	.035	.684	.010
West Virginia -----	5.3	14.3	57.9	.326	(D)	.035	.084	*.037
Wisconsin -----	5.7	23.9	89.6	.345	.425	(S)	.920	.008
Wyoming -----	1.7	17.3	83.9	.273	.416	*.022	.954	.017

Appendix A.

Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

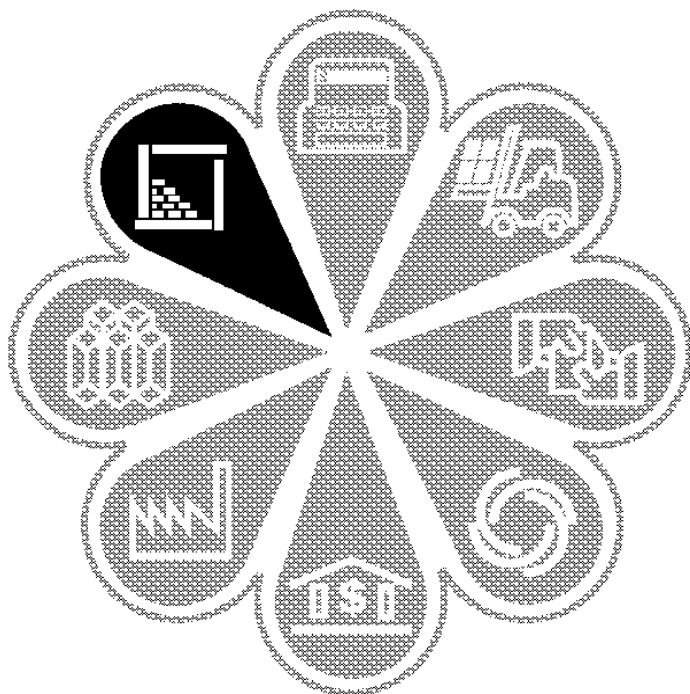
Census of Construction Industries

CC92-I-16

INDUSTRY SERIES

Carpentry Work Special Trade Contractors

Industry 1751



1992 Census of Construction Industries

CC92-I-16

INDUSTRY SERIES

Carpentry Work Special Trade Contractors

Industry 1751

Issued August 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Juliana Van Berkum**, **Susan L. Hostetter**, **Doris M. Kling**, **Carolyn J. Stone**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke**. Under the direction of **C. Lloyd Anderson**, the Systems Support Staff maintained the small computers and assisted in the management of computer output.

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Special Trade Contractors

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Summary of Findings

Establishments classified in this industry are primarily engaged in carpentry and framing work and installation involving post frame construction of prefabricated windows and doors (except revolving doors). Ship joinery contractors are also included in this industry. Establishments primarily engaged in building custom cabinets for individuals in a ship are classified in retail trade, industry 5712. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$13.0 billion in total dollar value of business. Of this amount, \$12.9 billion were for the value of construction work. These establishments paid out \$4.5 billion for materials, components, and supplies and \$1.5 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$204 million. Value added for 1992 was \$6.8 billion.

There were 38,210 establishments with total employment averaging 177,601 during the year. Total payroll for 1992 was \$3.5 billion.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Larger establishments with 20 employees or more, while representing only 3 percent of the total number of employer establishments in this industry, accounted for 32 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

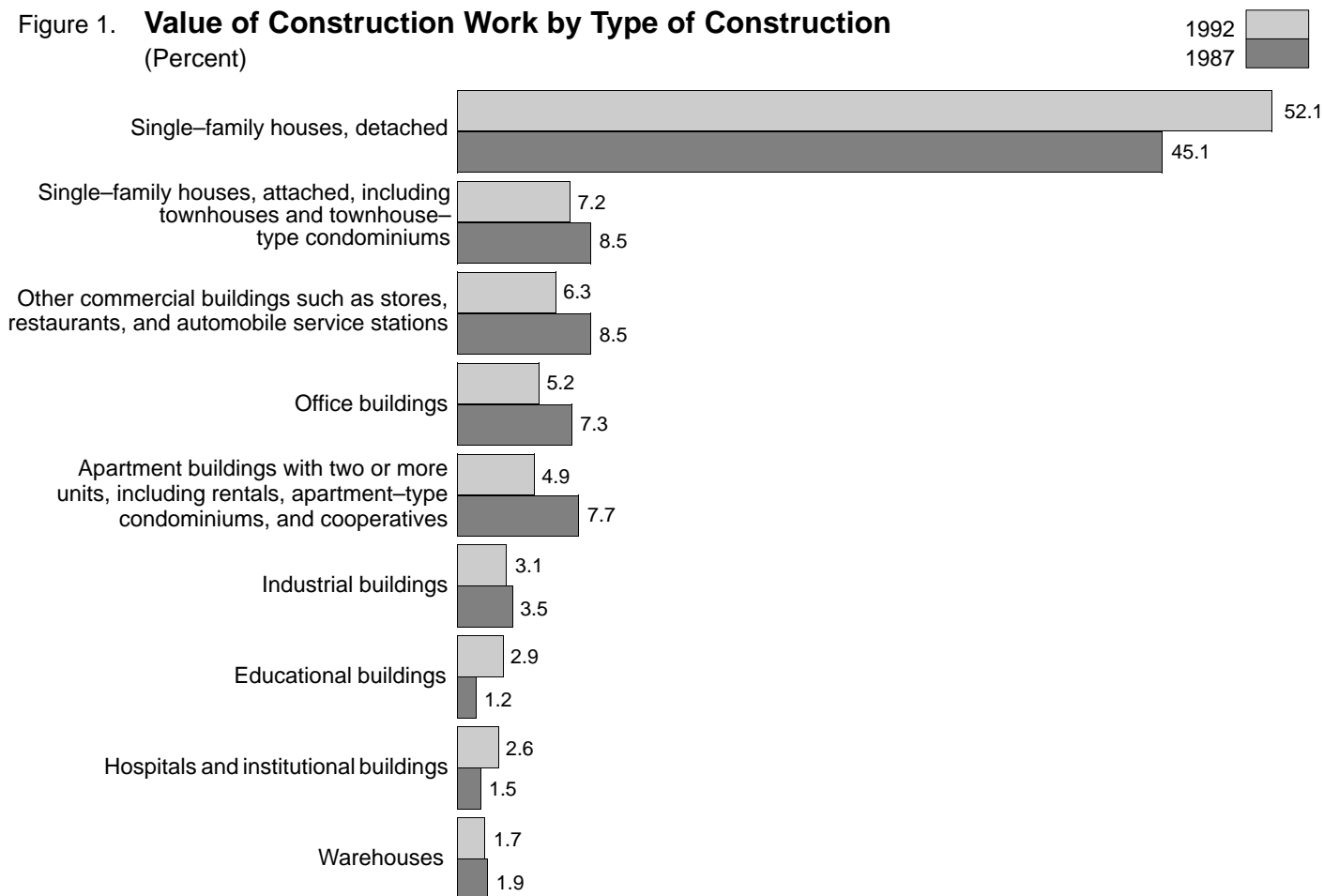


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

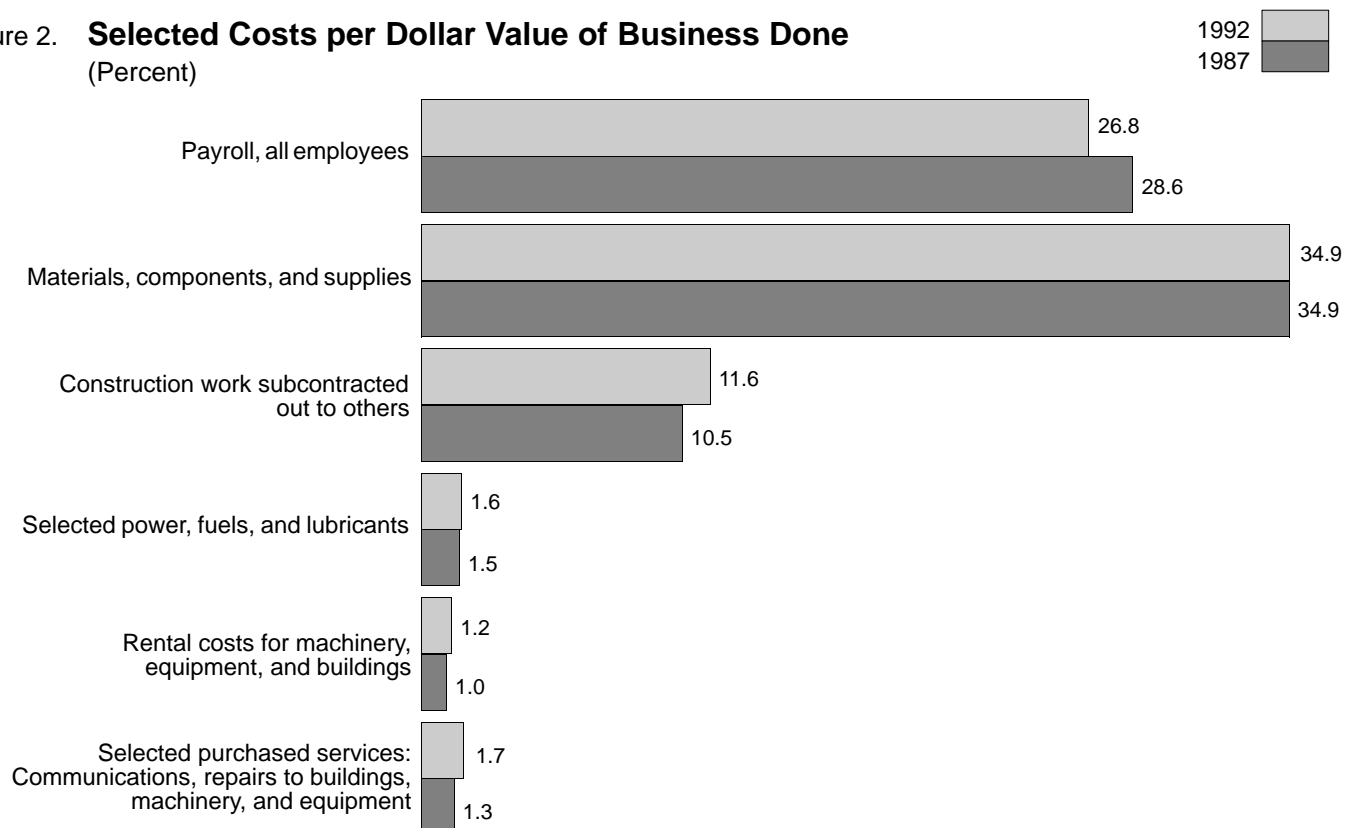


Table 1. **General Statistics for Establishments With Payroll by State: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	38 210	177 601	145 394	3 488 844	2 683 124	12 852 280	11 334 464	6 759 711	4 752 932
Alabama -----	372	1 543	1 293	23 837	19 452	96 396	82 870	46 376	37 509
Alaska -----	76	194	166	4 292	3 697	12 883	11 158	7 057	4 459
Arizona -----	489	6 561	5 638	127 529	102 891	483 709	459 780	221 374	249 349
Arkansas -----	186	627	555	9 948	8 506	39 392	35 646	23 210	12 669
California -----	3 395	26 272	21 685	581 781	444 193	2 056 278	1 898 900	1 128 125	795 885
Colorado -----	730	3 232	2 749	60 659	47 046	249 533	197 512	115 661	84 283
Connecticut -----	683	2 098	1 710	41 496	32 010	158 303	139 826	87 156	53 808
Delaware -----	123	509	431	8 104	6 592	33 190	28 212	15 371	13 214
District of Columbia -----	15	70	56	1 425	(S)	(S)	3 046	1 943	(S)
Florida -----	2 050	9 780	7 919	174 786	125 783	631 024	545 869	333 492	219 075
Georgia -----	772	3 138	2 621	46 288	36 899	171 521	151 768	88 455	64 941
Hawaii -----	90	932	787	29 407	22 076	83 619	75 877	49 055	28 159
Idaho -----	272	844	724	11 893	10 180	47 182	40 620	26 583	15 633
Illinois -----	1 863	11 230	9 110	286 304	220 239	866 503	795 754	469 694	335 875
Indiana -----	884	4 105	3 384	71 908	56 581	259 405	235 769	149 067	90 571
Iowa -----	568	2 127	1 805	34 325	28 879	137 770	121 411	72 562	54 340
Kansas -----	365	1 302	1 101	20 432	16 172	81 785	74 065	42 605	31 697
Kentucky -----	449	1 631	1 382	25 626	20 206	103 909	92 089	57 146	37 722
Louisiana -----	275	1 224	919	21 097	14 083	78 307	67 091	37 173	31 599
Maine -----	369	983	840	16 370	14 253	76 178	68 583	41 294	27 426
Maryland -----	1 066	5 323	4 332	97 670	76 040	304 201	262 439	165 546	100 650
Massachusetts -----	1 114	3 418	2 722	74 238	55 473	312 528	260 813	145 715	118 080
Michigan -----	1 628	7 760	6 226	149 838	113 404	564 889	490 858	299 510	198 797
Minnesota -----	751	3 551	2 851	67 722	51 642	256 508	224 344	132 657	93 711
Mississippi -----	175	677	563	10 463	7 849	42 707	37 633	18 705	19 722
Missouri -----	812	3 942	3 222	78 550	60 542	267 881	228 992	152 684	(S)
Montana -----	140	380	293	8 197	5 077	54 393	(D)	17 173	(D)
Nebraska -----	328	1 322	1 065	22 229	16 670	84 347	72 877	46 754	30 718
Nevada -----	181	2 461	2 138	57 831	45 714	199 553	194 109	107 477	87 398
New Hampshire -----	247	672	554	12 533	10 174	55 730	46 986	27 654	20 373
New Jersey -----	1 558	5 305	4 173	121 704	87 854	544 315	446 526	250 118	199 763
New Mexico -----	139	752	632	11 253	9 218	46 895	39 431	23 060	16 553
New York -----	3 112	11 293	8 982	236 553	177 896	886 633	790 587	470 761	337 237
North Carolina -----	1 186	4 449	3 702	71 698	56 491	264 400	230 758	145 294	90 166
North Dakota -----	108	327	276	4 876	4 133	29 127	24 389	12 430	12 410
Ohio -----	1 685	7 840	6 349	144 311	112 887	534 421	452 534	281 347	184 569
Oklahoma -----	357	1 634	1 367	27 623	21 855	113 511	85 835	56 777	30 135
Oregon -----	583	2 104	1 694	39 427	30 365	175 053	148 259	86 472	64 296
Pennsylvania -----	1 895	7 621	6 217	145 385	114 625	544 843	481 908	291 983	197 122
Rhode Island -----	255	640	550	12 041	10 320	47 435	41 709	24 171	18 328
South Carolina -----	574	2 233	1 813	35 112	26 725	152 582	127 586	71 202	57 257
South Dakota -----	140	474	406	6 307	5 263	23 138	(D)	12 531	(D)
Tennessee -----	485	1 932	1 597	30 776	23 238	128 137	109 740	65 061	45 228
Texas -----	1 539	6 951	5 645	125 238	95 825	462 146	392 344	241 918	156 141
Utah -----	255	865	697	12 939	10 286	43 879	38 511	25 902	(S)
Vermont -----	197	455	378	5 687	4 996	30 661	27 607	16 684	11 234
Virginia -----	1 062	5 233	4 320	95 735	73 048	331 460	290 175	177 421	113 548
Washington -----	1 265	4 663	3 748	93 111	71 417	328 722	298 779	197 095	109 345
West Virginia -----	188	755	609	12 602	9 743	47 805	43 702	26 971	17 168
Wisconsin -----	1 086	3 994	3 241	77 005	61 061	295 295	258 939	149 480	112 653
Wyoming -----	74	174	158	2 683	2 462	8 910	8 243	5 759	(S)

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
1 517 816	7 396 694	156 574	155 099	1 223 326	190 431	11 243 863	6 077 619	1	1	4	U.S.
13 526	43 722	588	(S)	5 904	1 144	42 502	23 135	10	11	(S)	AL
* 1 726	6 752	65	164	1 601	(S)	(S)	(S)	22	18	39	AK
23 929	453 883	5 225	6 092	46 091	5 254	354 896	174 374	5	4	12	AZ
* 3 746	19 215	486	168	1 824	643	24 313	13 241	13	18	15	AR
157 378	1 615 489	35 840	18 220	171 962	33 297	2 282 195	1 236 429	2	2	8	CA
52 021	188 949	2 399	(S)	27 589	2 195	155 316	66 603	6	8	(S)	CO
18 477	56 763	1 382	1 454	16 040	4 923	291 112	160 913	8	7	33	CT
4 978	11 553	284	604	6 667	437	24 293	13 823	10	16	36	DE
(S)	1 592	31	(S)	(S)	106	4 621	2 266	(Z)	(Z)	(S)	DC
85 155	472 310	13 530	7 254	59 767	10 700	531 014	287 369	4	4	21	FL
19 753	91 104	2 195	2 067	14 737	7 477	173 535	97 090	8	9	33	GA
7 742	51 824	697	469	(S)	509	42 634	22 003	8	6	13	HI
6 562	24 333	288	748	4 277	297	16 062	8 757	10	10	21	ID
70 750	485 828	9 173	11 955	80 720	11 316	820 248	462 223	3	3	24	IL
23 635	150 188	1 977	4 609	34 451	3 262	165 516	90 457	6	6	23	IN
16 359	39 885	(S)	1 420	16 598	1 049	67 038	35 049	9	9	39	IA
7 720	40 798	957	1 614	9 493	1 430	64 190	37 731	8	10	15	KS
11 820	40 750	(S)	1 775	7 465	1 362	60 702	35 563	7	7	17	KY
* 11 217	40 268	532	(S)	40 268	877	58 373	32 420	10	12	(S)	LA
7 595	14 383	725	1 040	7 860	1 628	101 329	53 604	11	12	24	ME
41 762	143 019	3 206	3 169	28 283	6 050	303 481	173 118	5	5	19	MD
51 715	120 920	3 593	(S)	26 900	6 703	440 947	228 119	6	5	(S)	MA
74 032	257 088	5 725	4 802	38 987	6 736	404 709	221 256	4	4	18	MI
32 164	142 078	3 589	2 485	19 077	3 637	198 200	107 419	6	7	22	MN
5 075	23 570	(S)	355	4 978	723	27 141	15 103	15	13	27	MS
(S)	125 139	1 591	3 308	18 214	4 298	231 853	129 783	6	8	16	MO
(D)	11 810	478	614	4 875	455	37 326	16 548	14	(D)	11	MT
11 471	40 427	646	1 467	8 853	874	47 319	22 736	9	10	18	NE
5 445	133 521	3 529	3 317	37 315	1 683	97 627	49 597	5	6	4	NV
8 743	19 346	684	376	6 689	1 916	100 491	54 041	8	10	24	NH
97 790	242 235	7 607	5 604	41 916	7 873	525 130	291 625	4	7	16	NJ
(S)	(S)	(S)	* 802	3 030	419	17 146	6 523	15	14	50	NM
96 046	359 282	9 512	8 997	101 627	14 433	973 950	537 670	3	3	13	NY
33 642	134 091	(S)	3 941	25 125	4 442	203 491	114 013	6	6	24	NC
* 4 738	7 470	262	500	2 984	387	19 577	9 589	14	19	25	ND
81 887	260 659	4 361	4 847	42 987	6 433	366 700	194 829	4	5	15	OH
27 676	56 631	791	2 191	9 075	844	44 787	25 168	7	9	17	OK
26 794	101 225	2 077	* 6 256	* 21 878	1 206	59 322	35 517	8	8	67	OR
62 935	234 638	5 965	8 226	67 544	8 455	502 227	252 606	4	4	25	PA
5 726	20 613	566	700	5 922	1 093	81 351	44 877	12	9	17	RI
(S)	80 817	(S)	852	9 062	1 878	82 365	48 313	8	9	31	SC
(D)	11 201	148	302	2 640	386	21 980	10 840	14	(D)	28	SD
18 397	(S)	1 373	1 422	12 011	2 410	118 990	72 316	10	8	22	TN
69 802	329 333	5 559	7 233	47 585	6 169	344 575	190 006	4	6	16	TX
5 368	25 717	353	556	3 949	600	36 597	18 700	8	8	20	UT
3 053	5 330	(S)	370	5 603	766	52 509	20 530	14	16	26	VT
41 285	224 175	5 533	3 907	32 029	5 962	289 388	151 165	5	4	16	VA
29 942	(S)	(S)	3 427	24 411	2 501	143 591	85 452	5	5	20	WA
4 104	22 259	620	848	4 952	398	18 513	10 341	13	15	30	WV
36 356	100 613	2 000	4 638	29 201	2 567	163 947	81 410	5	5	18	WI
(S)	4 730	40	276	2 195	(S)	(S)	(S)	15	14	18	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year -----	38 210	36 009	30 765	24 388	1	1	1	2
Proprietors and working partners -----	20 858	11 375	16 004	18 248	1	2	2	2
All employees** -----	177 601	190 431	132 543	124 646	1	1	1	1
Construction workers:								
March -----	133 131	152 637	105 446	97 894	1	1	1	1
May -----	149 112	166 772	114 294	118 957	1	1	1	1
August -----	157 106	176 368	119 639	125 303	1	1	1	1
November -----	142 227	161 054	113 756	116 177	1	1	1	2
Average -----	145 394	164 191	116 973	114 673	1	1	1	1
Other employees:								
March -----	34 274	27 228	15 476	9 446	1	1	2	2
May -----	30 812	25 925	(NA)	(NA)	1	1	(NA)	(NA)
August -----	32 182	26 406	(NA)	(NA)	1	1	(NA)	(NA)
November -----	31 559	25 347	(NA)	(NA)	1	1	(NA)	(NA)
Average -----	32 207	26 240	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees -----	3 488 844	3 272 194	1 612 024	1 202 203	1	1	1	1
Payroll, construction workers -----	2 683 124	2 609 930	1 352 248	1 060 685	1	1	1	1
Payroll, other employees -----	805 720	662 264	259 775	141 519	1	1	1	1
First-quarter payroll, all employees -----	786 479	731 050	344 748	235 201	1	1	1	1
Fringe benefits, all employees -----	777 506	690 431	300 748	236 265	1	1	1	1
Legally required expenditures -----	620 079	548 087	235 524	142 621	1	1	1	1
Voluntary expenditures -----	157 427	142 343	65 223	93 644	2	1	2	1
Dollar value of business done -----	13 030 458	11 452 175	5 512 195	3 646 984	1	1	1	1
Value of construction work -----	12 852 280	11 243 863	5 451 191	3 597 222	1	1	1	1
Value of construction work subcontracted in from others -----	7 396 694	4 964 753	2 070 197	2 188 387	2	1	1	1
Other business receipts -----	178 178	208 312	61 004	49 762	4	4	4	3
Net value of construction work† -----	11 334 464	10 038 947	4 758 524	3 328 382	1	1	1	1
Value added†† -----	6 759 711	6 077 619	2 928 660	2 083 098	1	1	1	1
Selected costs -----	6 270 748	5 374 556	2 583 534	1 563 887	1	1	1	1
Materials, components, and supplies -----	4 549 381	3 997 519	1 771 595	1 231 073	1	1	1	1
Construction work subcontracted out to others -----	1 517 816	1 204 915	692 666	268 840	3	2	1	3
Selected power, fuels, and lubricants -----	203 551	172 121	119 272	63 974	2	1	1	1
Electricity -----	33 146	26 963	17 495	6 460	2	3	2	2
Natural and manufactured gas -----	8 302	5 481	4 388	2 277	4	4	5	4
Gasoline and diesel fuel -----	155 320	129 077	87 840	47 040	2	1	2	1
On highway use -----	142 622	118 997	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use -----	12 699	10 080	(NA)	(NA)	6	3	(NA)	(NA)
Other, including lubricating oils and greases -----	6 783	10 599	9 547	8 198	4	4	3	3
Rental cost for machinery, equipment, and buildings -----	156 574	112 598	51 042	24 895	3	2	2	2
For machinery and equipment -----	66 834	50 416	26 801	16 588	3	2	2	2
For buildings -----	89 739	62 182	24 240	8 307	3	2	3	2
Selected purchased services -----	227 148	143 197	82 040	54 519	3	1	2	2
Communication services -----	92 726	60 704	36 404	20 432	3	2	2	2
Repairs to buildings and other structures -----	12 447	8 086	4 523	3 717	8	5	5	16
Repairs to machinery and equipment -----	121 975	74 405	41 113	30 370	4	2	2	2
Ownership of construction projects:								
Value of construction work -----	12 852 280	11 243 863	5 451 191	3 597 222	1	1	1	1
Government owned -----	1 030 571	641 582	460 375	121 532	7	5	7	3
Federal -----	278 063	217 125	(NA)	(NA)	7	7	(NA)	(NA)
State and local -----	752 508	424 456	(NA)	(NA)	9	6	(NA)	(NA)
Privately owned -----	11 821 709	10 602 280	4 990 815	3 475 690	1	1	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 116 982	742 321	2	2
Capital expenditures, other than land -----	155 099	147 868	4	3
New -----	118 574	122 729	5	3
Used -----	36 526	25 139	9	6
Retirements and disposition of depreciable assets -----	48 755	35 401	11	6
End-of-year gross book value of depreciable assets -----	1 223 326	854 789	2	2
Depreciation charges during year -----	145 075	117 077	3	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	229 731	200 411	6	5
Capital expenditures, other than land -----	23 310	15 115	18	7
New buildings and other structures -----	18 947	11 433	22	8
Used buildings and other structures -----	4 363	3 681	24	13
Retirements and disposition of depreciable assets -----	4 835	6 200	17	24
End-of-year gross book value of depreciable assets -----	248 207	209 326	7	5
Depreciation charges during year -----	18 685	16 946	6	6
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	887 251	541 910	2	2
Capital expenditures, other than land -----	131 789	132 753	4	3
New machinery and equipment, including automobiles and trucks -----	99 626	111 296	4	3
New automobiles and trucks, intended primarily for highway use -----	52 453	74 638	5	4
Used machinery and equipment, including automobiles and trucks -----	32 162	21 457	10	6
Retirements and disposition of depreciable assets -----	43 920	29 200	12	6
End-of-year gross book value of depreciable assets -----	975 119	645 463	2	2
Depreciation charges during year -----	126 390	100 130	3	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	38 210	1
Value of construction work	12 852 280	1
Establishments with inventories:		
Number	8 379	2
Value of construction work	4 465 480	1
Inventories ¹ :		
End of 1992, materials and supplies	213 752	7
End of 1991, materials and supplies	178 424	4
Establishments with no inventories:		
Number	15 013	1
Value of construction work	4 587 427	1
Establishments not reporting:		
Number	14 819	1
Value of construction work	3 799 373	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	38 210	28 064	6 441	2 442	998	184	66	14	1	—
All employees** -----	177 601	49 918	40 633	31 310	28 776	12 353	9 478	5 133	(D)	—
Payroll, all employees -----	3 488 844	772 458	734 379	661 368	658 842	297 004	243 683	121 110	(D)	—
Dollar value of business done -----	13 030 458	3 956 125	2 620 665	2 278 917	2 164 034	908 960	750 250	351 507	(D)	—
Value of construction work -----	12 852 280	3 921 939	2 584 406	2 238 714	2 126 564	900 094	730 493	350 071	(D)	—
Net value of construction work† -----	11 334 464	3 370 383	2 252 459	1 973 833	1 870 880	822 552	697 907	346 450	(D)	—
Value added†† -----	6 759 711	1 920 203	1 384 247	1 212 172	1 103 942	524 932	396 150	218 064	(D)	—
Cost of materials, components, supplies, and fuels -----	4 752 932	1 484 366	904 471	801 864	804 409	306 486	321 514	129 822	(D)	—
Cost of construction work subcontracted out to others -----	1 517 816	551 556	331 946	264 881	255 684	77 542	32 586	3 621	(D)	—
Rental cost for machinery, equipment, and buildings -----	156 574	40 659	30 094	29 144	33 045	9 548	9 702	4 381	(D)	—
Capital expenditures, other than land -----	155 099	46 764	51 374	18 348	21 590	5 312	7 019	4 692	(D)	—
End-of-year gross book value of depreciable assets -----	1 223 326	381 031	269 802	190 853	195 112	54 994	73 041	58 493	(D)	—
1987										
All employees** -----	190 431	(S)	39 572	31 084	30 890	15 382	13 752	7 560	5 291	(D)
Value of construction work -----	11 243 863	(S)	2 112 674	1 924 152	1 940 869	969 269	1 035 173	496 989	(D)	(D)
Value added†† -----	6 077 619	(S)	1 133 113	1 033 878	1 081 388	534 454	573 230	236 167	49 686	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	2	3	3	3	2	(Z)	(Z)	(D)	—
Net value of construction work† -----	1	2	3	3	2	1	(Z)	(Z)	(D)	—
Capital expenditures, other than land -----	4	5	11	8	4	(Z)	(Z)	(Z)	(D)	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	38 210	(S)	(S)	7 625	12 579	5 761	2 845	1 737	491	152	63
All employees** -----	177 601	(S)	(S)	12 527	37 980	30 739	25 546	29 377	14 367	10 139	10 821
Payroll, all employees -----	3 488 844	(S)	(S)	151 457	570 259	554 649	512 365	668 953	386 930	285 052	306 999
Dollar value of business done -----	13 030 458	(S)	(S)	555 573	1 965 963	1 987 990	1 923 928	2 568 987	1 649 846	1 057 375	1 132 501
Value of construction work -----	12 852 280	(S)	(S)	552 350	1 947 032	1 963 928	1 900 541	2 522 780	1 621 597	1 040 534	1 116 262
Net value of construction work† -----	11 334 464	(S)	(S)	508 761	1 764 837	1 739 634	1 673 510	2 160 981	1 357 101	925 516	1 028 862
Value added†† -----	6 759 711	(S)	(S)	328 448	1 145 822	1 060 173	976 438	1 256 381	753 579	529 390	595 449
Cost of materials, components, supplies, and fuels -----	4 752 932	(S)	(S)	183 536	637 945	703 524	720 460	950 807	631 773	412 968	449 652
Cost of construction work subcontracted out to others -----	1 517 816	(S)	(S)	(S)	182 196	224 294	227 031	361 799	264 495	115 018	87 400
Rental cost for machinery, equipment, and buildings -----	156 574	(S)	(S)	5 230	21 868	23 886	25 757	36 938	18 853	12 515	10 253
Capital expenditures, other than land -----	155 099	(S)	(S)	10 498	30 583	30 259	21 269	29 669	11 071	8 428	10 870
End-of-year gross book value of depreciable assets -----	1 223 326	(S)	(S)	72 013	231 372	191 193	152 103	240 585	121 612	77 622	105 244
1987											
All employees** -----	190 431	(S)	(S)	(S)	(S)	26 938	26 020	27 645	16 420	11 225	19 476
Value of construction work -----	11 243 863	(S)	(S)	(S)	(S)	1 463 042	1 639 839	2 024 900	1 295 037	994 405	1 365 731
Value added†† -----	6 077 619	(S)	(S)	(S)	(S)	773 319	841 698	1 082 408	684 593	519 849	741 913
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	3	2	3	3	2	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	3	2	3	3	3	3	2	(Z)
Capital expenditures, other than land -----	4	(S)	(S)	10	7	9	10	17	5	2	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	12 852 280	7 346 851	3 154 385	1 152 540	1	1	2	2
Building construction	11 544 308	7 273 508	3 130 293	1 140 507	1	1	2	3
Single-family houses	7 631 610	5 225 999	1 767 595	638 016	1	2	3	3
Single-family houses, detached	6 695 208	4 527 651	1 617 455	550 102	1	2	2	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	936 401	698 348	150 140	87 914	3	4	11	8
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	625 410	412 851	136 930	75 629	3	4	5	8
Other residential buildings, including hotels, motels, and tourist cabins	146 708	92 916	42 876	10 916	7	8	11	23
Office buildings	662 946	304 335	296 466	62 146	3	5	4	8
Other commercial buildings such as stores, restaurants, and automobile service stations	807 346	409 983	261 682	135 680	3	4	4	6
Industrial buildings and warehouses	619 693	335 061	156 554	128 077	3	4	6	4
Industrial buildings	395 244	207 047	103 828	84 369	3	4	6	5
Warehouses	224 449	128 014	52 726	43 709	5	5	9	7
Religious buildings	100 432	45 961	48 663	5 809	6	9	7	15
Educational buildings	367 141	150 630	193 955	22 556	10	12	15	14
Hospitals and institutional buildings	330 017	139 375	161 532	29 109	5	6	6	11
Farm buildings, nonresidential	89 850	68 409	8 998	12 443	10	12	13	11
Amusement, social, and recreational buildings, indoors	60 472	25 587	26 078	8 807	7	10	7	10
Other nonresidential buildings	102 684	62 401	28 964	11 319	8	9	14	17
Nonbuilding construction	109 468	73 343	24 092	12 033	6	8	4	9
Construction work, n.s.k.	1 198 504	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
1987								
Value of construction work	11 243 863	6 820 191	2 499 876	1 039 789	1	1	2	2
Building construction	10 231 221	6 740 789	2 466 508	1 023 924	1	1	2	2
Single-family houses	6 024 429	4 252 215	1 255 364	516 849	1	1	2	3
Single-family houses, detached	5 068 844	3 480 365	1 138 829	449 649	1	1	3	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	955 584	771 850	116 534	67 199	2	2	5	8
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	867 966	683 530	111 951	72 485	2	3	7	6
Other residential buildings, including hotels, motels, and tourist cabins	319 275	179 792	109 697	29 785	4	4	8	8
Office buildings	815 411	436 397	303 085	75 927	3	3	4	3
Other commercial buildings such as stores, restaurants, and automobile service stations	953 797	535 519	282 951	135 326	3	4	4	4
Industrial buildings and warehouses	603 072	360 017	128 794	114 261	2	3	5	5
Industrial buildings	394 922	221 839	93 233	79 849	3	3	6	5
Warehouses	208 149	138 177	35 560	34 411	3	3	10	7
Educational buildings	140 430	55 835	74 013	10 582	6	8	9	10
Hospitals and institutional buildings	168 239	71 376	80 303	16 559	5	8	6	11
Other nonresidential buildings	338 602	166 108	120 350	52 150	11	15	16	17
Nonbuilding construction	128 635	79 402	33 368	15 865	8	9	23	8
Construction work, n.s.k.	884 005	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments -----	38 210	177 601	3 488 844	12 852 280	9 750 293	11 334 464	6 759 711	1 517 816	1	1	3
Establishments not specializing by type -----	3 529	24 427	555 162	2 020 569	(NA)	1 769 091	1 017 070	251 479	3	3	8
Establishments specializing 51 percent or more -----	34 681	153 174	2 933 682	10 831 711	9 750 293	9 565 374	5 742 641	1 266 337	1	1	3
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	24 140	99 389	1 804 825	6 738 393	6 142 789	5 957 242	3 543 529	781 152	1	1	4
Establishments with —											
100 percent specialization -----	16 492	58 100	978 903	3 688 092	3 688 092	3 222 450	1 994 399	465 642	2	2	5
90 to 99 percent specialization -----	3 256	15 328	294 862	1 162 162	1 092 952	1 026 519	576 725	135 643	3	4	7
80 to 89 percent specialization -----	1 697	9 332	182 893	685 151	564 585	626 601	361 673	58 551	4	4	8
70 to 79 percent specialization -----	1 514	7 627	149 938	548 697	401 048	493 768	279 071	54 930	5	5	10
60 to 69 percent specialization -----	896	6 926	147 765	494 744	308 908	440 488	247 030	54 256	4	5	25
51 to 59 percent specialization -----	285	2 076	50 464	159 547	87 205	147 416	84 631	12 131	8	8	20
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	1 555	6 869	140 653	537 564	457 163	457 602	268 835	79 962	5	6	16
Establishments with —											
100 percent specialization -----	936	3 462	63 837	221 883	221 883	189 097	128 491	32 786	7	8	18
90 to 99 percent specialization -----	139	813	17 512	76 080	70 793	64 489	30 499	(S)	16	17	(S)
80 to 89 percent specialization -----	125	475	9 092	48 785	39 281	34 368	21 186	*14 417	23	35	72
70 to 79 percent specialization -----	220	1 009	21 027	76 470	56 586	66 712	37 048	(S)	11	12	(S)
60 to 69 percent specialization -----	92	805	20 496	78 975	48 820	74 246	36 807	4 729	13	13	34
51 to 59 percent specialization -----	42	306	8 689	35 372	19 800	28 690	14 805	6 683	18	20	13
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type -----	770	5 589	129 527	436 022	348 734	374 559	225 440	61 463	5	5	11
Establishments with —											
100 percent specialization -----	320	1 522	37 052	114 884	114 884	88 210	52 682	26 674	11	10	23
90 to 99 percent specialization -----	61	607	15 663	58 596	55 128	49 959	33 489	(S)	15	11	(S)
80 to 89 percent specialization -----	94	765	15 229	43 702	35 930	41 630	27 424	2 072	13	11	27
70 to 79 percent specialization -----	(S)	1 179	23 647	(S)	(S)	(S)	41 730	(S)	11	(S)	(S)
60 to 69 percent specialization -----	115	1 050	29 244	108 938	66 745	100 081	55 997	8 857	10	16	35
51 to 59 percent specialization -----	61	466	8 692	23 571	12 879	22 271	14 119	*1 300	14	12	42
OFFICE BUILDINGS											
All establishments specializing in type -----	858	5 662	152 222	446 805	368 630	386 851	254 919	59 954	5	4	7
Establishments with —											
100 percent specialization -----	349	1 738	42 655	125 565	125 565	117 791	78 559	7 774	10	9	17
90 to 99 percent specialization -----	114	774	25 540	71 448	66 989	60 579	45 637	10 869	10	10	22
80 to 89 percent specialization -----	105	931	25 949	62 006	50 561	(D)	39 800	(D)	15	13	(D)
70 to 79 percent specialization -----	128	1 019	34 959	109 945	78 799	84 065	47 229	25 879	9	8	9
60 to 69 percent specialization -----	129	1 032	20 684	66 688	40 773	57 154	37 355	9 534	14	10	17
51 to 59 percent specialization -----	33	167	2 436	11 153	5 943	(D)	6 339	(D)	38	28	(D)
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	1 021	7 090	157 011	512 842	438 017	444 991	277 287	67 851	5	5	7
Establishments with —											
100 percent specialization -----	477	3 687	83 164	243 317	243 317	212 889	150 583	30 428	7	8	12
90 to 99 percent specialization -----	75	731	15 828	56 047	52 584	48 568	22 442	7 479	14	14	16
80 to 89 percent specialization -----	78	512	11 548	37 812	31 271	35 182	22 872	2 630	23	19	26
70 to 79 percent specialization -----	(S)	900	17 451	63 154	44 942	43 997	23 751	19 157	18	13	10
60 to 69 percent specialization -----	132	729	16 649	61 588	38 067	59 134	31 736	2 454	19	16	28
51 to 59 percent specialization -----	(S)	531	12 371	50 925	27 837	45 221	(S)	(S)	18	17	(S)
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	278	1 876	49 983	174 884	137 367	157 117	95 312	17 767	8	7	13
Establishments with —											
100 percent specialization -----	123	654	18 564	55 436	55 436	48 763	32 341	6 673	13	11	25
90 to 99 percent specialization -----	*31	109	3 298	9 179	8 361	(D)	7 291	(D)	21	25	(D)
80 to 89 percent specialization -----	10	189	5 689	20 415	17 062	(D)	9 863	(D)	17	17	(D)
70 to 79 percent specialization -----	26	328	7 034	29 327	21 025	25 584	(S)	*3 743	14	18	42
60 to 69 percent specialization -----	62	296	6 964	29 308	18 206	25 372	17 545	3 935	27	20	6
51 to 59 percent specialization -----	26	299	8 434	31 219	17 277	29 940	14 058	1 279	17	13	25
EDUCATIONAL BUILDINGS											
All establishments specializing in type -----	286	1 778	48 928	258 961	201 109	206 208	109 022	52 753	12	18	37
Establishments with —											
100 percent specialization -----	84	335	8 290	31 628	31 628	29 587	22 166	2 041	29	17	28
90 to 99 percent specialization -----	43	228	6 302	*32 672	*30 055	*27 874	15 264	(S)	18	49	(S)
80 to 89 percent specialization -----	77	543	11 494	50 234	40 434	44 288	22 597	*5 946	30	36	68
70 to 79 percent specialization -----	36	300	12 221	*89 039	*64 930	57 825	19 116	*31 213	16	40	59
60 to 69 percent specialization -----	19	302	8 127	(S)	(S)	(S)	(S)	(S)	19	(S)	(S)
51 to 59 percent specialization -----	(S)	(S)	2 494	(S)	(S)	(S)	(S)	*264	(S)	(S)	40

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	38 210	145 394	133 131	149 112	157 106	142 227	1	1	1	1	1	1
Alabama	372	1 293	1 257	1 401	1 350	1 163	9	10	11	10	10	11
Alaska	76	166	113	155	199	198	16	23	23	23	21	20
Arizona	489	5 638	4 768	5 338	6 010	6 439	6	5	5	5	5	6
Arkansas	186	555	537	566	585	533	11	12	12	11	12	12
California	3 395	21 685	20 366	23 238	24 110	19 028	2	2	2	2	2	3
Colorado	730	2 749	2 518	2 698	2 993	2 787	5	6	7	6	6	7
Connecticut	683	1 710	1 447	1 708	2 030	1 652	4	8	8	9	11	7
Delaware	123	431	389	459	(S)	444	12	11	11	10	(S)	10
District of Columbia	15	56	51	54	55	(S)	(Z)	(Z)	(Z)	(Z)	(Z)	(S)
Florida	2 050	7 919	7 434	8 101	8 139	8 002	3	4	4	4	4	5
Georgia	772	2 621	2 369	2 762	2 744	2 608	5	8	8	9	8	8
Hawaii	90	787	702	808	914	723	11	9	11	10	9	8
Idaho	272	724	624	744	815	713	6	10	9	10	12	10
Illinois	1 863	9 110	7 867	9 457	10 065	9 051	3	3	3	3	3	3
Indiana	884	3 384	3 039	3 349	3 724	3 426	5	6	6	6	6	7
Iowa	568	1 805	1 673	1 927	1 932	1 689	6	9	9	11	8	10
Kansas	365	1 101	1 030	1 060	1 253	1 060	5	9	9	9	9	9
Kentucky	449	1 382	1 272	1 388	1 516	1 352	6	7	8	7	8	8
Louisiana	275	919	816	848	1 019	993	6	11	13	13	13	13
Maine	369	840	659	844	1 015	840	6	10	11	10	11	11
Maryland	1 066	4 332	3 836	4 415	4 624	4 452	5	6	5	6	6	6
Massachusetts	1 114	2 722	2 422	2 730	3 065	2 670	4	6	6	6	6	6
Michigan	1 628	6 226	5 593	6 086	6 398	6 825	3	4	4	4	4	3
Minnesota	751	2 851	2 411	2 866	3 216	2 911	4	6	7	6	6	6
Mississippi	175	563	490	568	593	601	9	15	15	14	16	18
Missouri	812	3 222	2 974	3 236	3 582	3 097	5	6	6	5	6	6
Montana	140	293	251	303	349	269	9	14	14	14	11	13
Nebraska	328	1 065	976	1 112	1 204	966	8	10	10	10	9	10
Nevada	181	2 138	2 037	2 365	2 019	2 129	11	5	5	5	5	5
New Hampshire	247	554	466	583	602	564	5	8	9	9	8	9
New Jersey	1 558	4 173	3 895	4 283	4 430	4 085	4	4	4	4	5	4
New Mexico	139	632	667	661	651	547	13	15	16	15	15	17
New York	3 112	8 982	8 185	9 289	9 610	8 843	2	3	3	3	3	3
North Carolina	1 186	3 702	3 595	3 846	3 932	3 434	4	6	6	6	7	6
North Dakota	108	276	224	267	335	279	6	15	16	14	14	16
Ohio	1 685	6 349	5 846	6 359	6 919	6 271	3	4	5	4	4	4
Oklahoma	357	1 367	1 045	1 244	1 634	1 544	7	7	10	9	7	6
Oregon	583	1 694	1 742	1 698	1 772	1 563	6	8	9	8	8	9
Pennsylvania	1 895	6 217	5 721	6 248	6 803	6 098	3	4	4	4	4	4
Rhode Island	255	550	450	571	617	562	7	12	12	14	13	11
South Carolina	574	1 813	1 726	1 905	1 892	1 729	5	8	9	8	8	9
South Dakota	140	406	367	410	458	390	8	13	13	12	13	14
Tennessee	485	1 597	1 482	1 750	1 680	1 477	6	10	9	12	11	10
Texas	1 539	5 645	5 196	5 740	6 024	5 620	4	4	5	5	4	4
Utah	255	697	626	735	758	671	7	8	9	9	8	9
Vermont	197	378	275	349	421	467	9	14	12	12	13	16
Virginia	1 062	4 320	4 099	4 603	4 479	4 097	4	5	5	5	5	5
Washington	1 265	3 748	3 926	3 866	3 798	3 402	4	5	5	5	5	6
West Virginia	188	609	594	615	674	552	9	13	13	13	14	14
Wisconsin	1 086	3 241	2 924	3 332	3 491	3 216	3	5	6	5	5	5
Wyoming	74	158	156	172	175	129	11	16	17	15	15	17

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	12 852 280	38 008	12 266 718	3 550	585 562	11 243 863	14.3	1	1	5
Alabama -----	98 016	364	93 035		4 982	50 381	94.6	11	11	28
Alaska -----	12 980	76	12 858	*12	*122	6 835	89.9	18	19	40
Arizona -----	442 707	488	439 666	28	3 041	364 078	21.6	5	5	12
Arkansas -----	38 755	185	38 109	44	646	26 717	45.1	20	20	29
California -----	2 081 777	3 393	2 048 580	77	33 197	2 199 259	-5.3	2	2	15
Colorado -----	254 906	729	247 167	55	7 739	159 484	59.8	10	10	18
Connecticut -----	164 964	683	156 672	88	8 292	291 210	-43.4	7	7	15
Delaware -----	54 514	(S)	32 107	80	*22 407	25 001	118.0	26	15	60
District of Columbia -----	35 263	(S)	(S)	178	32 569	29 069	21.3	9	(S)	10
Florida -----	641 938	(S)	624 653	72	17 285	583 775	10.0	4	4	11
Georgia -----	171 335	762	163 095	55	8 240	224 513	-23.7	8	9	13
Hawaii -----	84 414	(S)	83 619	9	795	45 017	87.5	5	5	16
Idaho -----	47 884	(S)	43 342	34	4 543	13 701	249.5	11	11	35
Illinois -----	853 270	1 863	837 068	119	16 202	820 900	3.9	3	3	19
Indiana -----	261 555	879	248 585	112	12 971	164 304	59.2	6	6	13
Iowa -----	128 550	568	126 834	60	1 715	66 867	92.2	9	9	26
Kansas -----	80 671	365	74 137	69	6 534	74 550	8.2	9	10	27
Kentucky -----	105 949	446	96 284	108	9 666	67 930	56.0	8	9	13
Louisiana -----	110 125	(S)	77 677	37	32 448	64 508	70.7	11	15	2
Maine -----	78 039	367	75 532	51	2 507	100 295	-22.2	12	12	33
Maryland -----	293 088	1 058	259 300	186	33 788	257 764	13.7	5	6	14
Massachusetts -----	310 191	1 109	298 999	100	11 192	442 343	-29.9	5	6	17
Michigan -----	560 503	1 620	556 362	70	4 141	402 768	39.2	4	4	16
Minnesota -----	262 075	743	250 916	90	*11 159	195 519	34.0	7	7	40
Mississippi -----	48 685	166	37 472	35	11 213	32 467	50.0	12	15	6
Missouri -----	277 407	808	253 430	87	*23 978	218 488	27.0	11	11	50
Montana -----	36 809	(S)	36 267	*7	*543	36 274	1.5	9	9	49
Nebraska -----	78 050	328	75 921	31	*2 130	44 306	76.2	10	10	46
Nevada -----	244 776	181	198 528	68	46 248	102 966	137.7	5	6	8
New Hampshire -----	51 358	246	48 044	73	3 314	105 616	-51.4	11	11	14
New Jersey -----	481 875	1 541	465 917	134	15 958	498 441	-3.3	7	7	12
New Mexico -----	47 321	(S)	44 769	*14	2 551	17 417	171.7	13	13	13
New York -----	930 993	3 103	875 529	194	55 464	993 093	-6.3	3	3	17
North Carolina -----	259 371	1 180	251 121	102	8 250	187 169	38.6	6	7	12
North Dakota -----	29 341	108	(D)	*11	(D)	20 979	39.9	23	(D)	(D)
Ohio -----	534 633	1 677	521 333	97	13 300	360 057	48.5	6	6	10
Oklahoma -----	95 160	357	93 915	30	1 245	46 937	102.7	15	15	19
Oregon -----	163 573	583	162 113	41	*1 460	59 235	176.1	9	9	46
Pennsylvania -----	542 178	1 887	519 942	141	22 237	492 209	10.2	4	4	26
Rhode Island -----	46 702	254	43 489	57	3 214	82 302	-43.3	8	8	25
South Carolina -----	151 813	(S)	149 445	55	2 368	80 420	88.8	10	10	31
South Dakota -----	25 708	132	21 217	*27	*4 491	21 918	17.3	16	13	67
Tennessee -----	129 235	476	123 425	59	5 810	113 570	13.8	8	8	20
Texas -----	462 136	(S)	445 462	54	16 674	337 035	37.1	6	6	11
Utah -----	41 069	(S)	(D)	(S)	(D)	37 158	10.5	9	(D)	(D)
Vermont -----	31 313	197	30 167	*21	(S)	52 625	-40.5	15	15	(S)
Virginia -----	282 959	1 061	260 355	151	22 604	289 951	-2.4	4	5	7
Washington -----	348 788	(S)	324 829	62	23 958	145 535	139.7	5	5	10
West Virginia -----	41 442	164	38 105	57	3 338	22 161	87.0	16	17	27
Wisconsin -----	287 397	1 077	282 019	113	5 378	165 006	74.2	5	5	30
Wyoming -----	8 716	(S)	8 053	22	664	3 715	134.6	14	14	32

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	13 030 458	11 452 175	1	1
SPECIAL TRADE CONTRACTORS				
Carpentry contractor.....	9 742 272	9 134 082	1	1
Garage and overhead door installation contractor.....	1 355 742	868 410	3	4
Post frame contractor	445 922	(NA)	5	(NA)
Siding contractor	88 923	30 438	19	16
Other construction activities	812 509	648 472	4	(NA)
OTHER BUSINESS ACTIVITIES				
Manufacturing	25 483	24 988	13	6
Retail trade	67 254	57 661	6	8
Other business activities	76 547	125 800	5	(NA)
Kind of business activity, n.s.k.	415 806	562 324	5	6

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	4.6	5.3	1
Number of construction workers	3.8	4.6	1
Number of all other employees .....	.8	.7	1
Payroll, all employees	91.3	90.9	1
Payroll, construction workers	70.2	72.5	1
Payroll, other employees	21.1	18.4	1
Dollar value of business done	341.0	318.0	1
Value of construction work	336.4	312.3	1
Cost of materials, components, supplies, and fuels	124.4	115.8	1
Construction work subcontracted to others	39.7	33.5	3
Rental cost for machinery, equipment, and buildings	4.1	3.1	3
Capital expenditures, other than land	4.1	4.1	5
Gross book value of depreciable assets	32.0	23.7	3
AVERAGE PER EMPLOYEE			
Payroll, all employees	19.6	17.2	(Z)
Dollar value of business done	73.4	60.1	1
Value added††	38.1	31.9	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers	18.5	15.9	(Z)
Value of construction work	88.4	68.5	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees	25.0	25.2	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees .....	.271	.291	1
Cost of materials, components, supplies, and fuels .....	.370	.371	1
Cost of construction work subcontracted out to others .....	.118	.107	2
Value of construction work subcontracted in from others .....	.576	.442	2
Rental cost for machinery, equipment, and buildings .....	.012	.010	2

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	4.6	19.6	88.4	.271	.370	.118	.576	.012
Alabama -----	4.2	15.4	74.6	.247	.389	.140	.454	.006
Alaska -----	2.6	22.1	77.6	.333	.346	.134	.524	.005
Arizona -----	13.4	19.4	85.8	.264	.515	.049	.938	.011
Arkansas -----	3.4	15.9	71.0	.253	.322	.095	.488	.012
California -----	7.7	22.1	94.8	.283	.387	.077	.786	.017
Colorado -----	4.4	18.8	90.8	.243	.338	.208	.757	.010
Connecticut -----	3.1	19.8	92.6	.262	.340	.117	.359	.009
Delaware -----	4.2	15.9	77.0	.244	.398	.150	.348	.009
District of Columbia -----	4.7	20.4	(S)	(S)	(S)	(S)	(S)	(S)
Florida -----	4.8	17.9	79.7	.277	.347	.135	.748	.021
Georgia -----	4.1	14.8	65.4	.270	.379	.115	.531	.013
Hawaii -----	10.4	31.6	106.3	.352	.337	.093	.620	.008
Idaho -----	3.1	14.1	65.2	.252	.331	.139	.516	.006
Illinois -----	6.0	25.5	95.1	.330	.388	.082	.561	.011
Indiana -----	4.6	17.5	76.7	.277	.349	.091	.579	.008
Iowa -----	3.7	16.1	76.3	.249	.394	.119	.290	(S)
Kansas -----	3.6	15.7	74.3	.250	.388	.094	.499	.012
Kentucky -----	3.6	15.7	75.2	.247	.363	.114	.392	(S)
Louisiana -----	4.4	17.2	85.2	.269	.404	.143	.514	.007
Maine -----	2.7	16.7	90.7	.215	.360	.100	.189	.010
Maryland -----	5.0	18.3	70.2	.321	.331	.137	.470	.011
Massachusetts -----	3.1	21.7	114.8	.238	.378	.165	.387	.011
Michigan -----	4.8	19.3	90.7	.265	.352	.131	.455	.010
Minnesota -----	4.7	19.1	90.0	.264	.365	.125	.554	.014
Mississippi -----	3.9	15.5	75.9	.245	.462	.119	.552	(S)
Missouri -----	4.9	19.9	83.1	.293	(S)	(S)	.467	.006
Montana -----	2.7	21.6	185.6	.151	(D)	(D)	.217	.009
Nebraska -----	4.0	16.8	79.2	.264	.364	.136	.479	.008
Nevada -----	13.6	23.5	93.3	.290	.438	.027	.669	.018
New Hampshire -----	2.7	18.7	100.6	.225	.366	.157	.347	.012
New Jersey -----	3.4	22.9	130.4	.224	.367	.180	.445	.014
New Mexico -----	5.4	15.0	74.2	.240	.353	(S)	(S)	(S)
New York -----	3.6	20.9	98.7	.267	.380	.108	.405	.011
North Carolina -----	3.8	16.1	71.4	.271	.341	.127	.507	(S)
North Dakota -----	3.0	14.9	105.5	.167	.426	.163	.256	.009
Ohio -----	4.7	18.4	84.2	.270	.345	.153	.488	.008
Oklahoma -----	4.6	16.9	83.0	.243	.265	.244	.499	.007
Oregon -----	3.6	18.7	103.3	.225	.367	.153	.578	.012
Pennsylvania -----	4.0	19.1	87.6	.267	.362	.116	.431	.011
Rhode Island -----	2.5	18.8	86.2	.254	.386	.121	.435	.012
South Carolina -----	3.9	15.7	84.2	.230	.375	(S)	.530	(S)
South Dakota -----	3.4	13.3	57.0	.273	(D)	(D)	.484	.006
Tennessee -----	4.0	15.9	80.2	.240	.353	.144	(S)	.011
Texas -----	4.5	18.0	81.9	.271	.338	.151	.713	.012
Utah -----	3.4	15.0	63.0	.295	(S)	.122	.586	.008
Vermont -----	2.3	12.5	81.1	.185	.366	.100	.174	(S)
Virginia -----	4.9	18.3	76.7	.289	.343	.125	.676	.017
Washington -----	3.7	20.0	87.7	.283	.333	.091	(S)	(S)
West Virginia -----	4.0	16.7	78.5	.264	.359	.086	.466	.013
Wisconsin -----	3.7	19.3	91.1	.261	.381	.123	.341	.007
Wyoming -----	2.4	15.4	56.4	.301	(S)	(S)	.531	.005

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

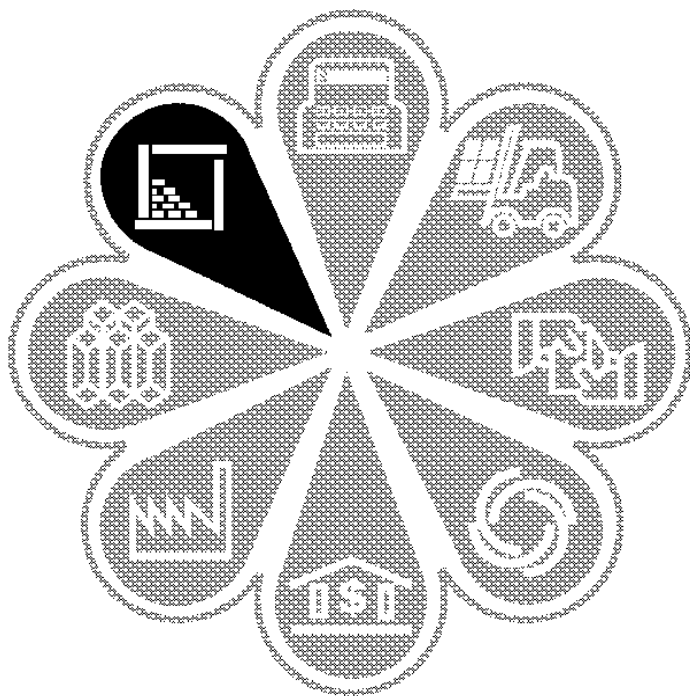
Census of Construction Industries

CC92-I-17

INDUSTRY SERIES

Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified

Industry 1752



1992

Census of

Construction Industries

CC92-I-17

INDUSTRY SERIES

Floor Laying and

Other Floor Work

Special Trade Contractors,

Not Elsewhere Classified

Industry 1752

Issued August 1995



U.S. Department of Commerce

Ronald H. Brown, Secretary

David J. Barram, Deputy Secretary

Economics and Statistics Administration

Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS

Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



**Economics and Statistics
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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Floor Laying and Other Floor Work Special Trade Contractors Not Elsewhere Classified

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appears as part of the number of each page]

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Summary of Findings

Establishments classified in this industry are primarily engaged in the installation and or removal of floor coverings such as carpeting, asphalt tile, linoleum and resilient flooring. This industry also includes contractors engaged in laying, scraping, finishing or refinishing of parquet and other hardwood flooring. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$4.5 billion in total dollar value of business. Of this amount, \$4.4 billion were for the value of construction work. These establishments paid out \$1.9 billion for materials, components, and supplies and \$395 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$71 million. Value added for 1992 was \$2.2 billion.

There were 10,196 establishments with total employment averaging 48,948 during the year. Total payroll for 1992 was \$1.1 billion.

Larger establishments with 20 employees or more, while representing only 4 percent of the total number of employer establishments in this industry, accounted for 34 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

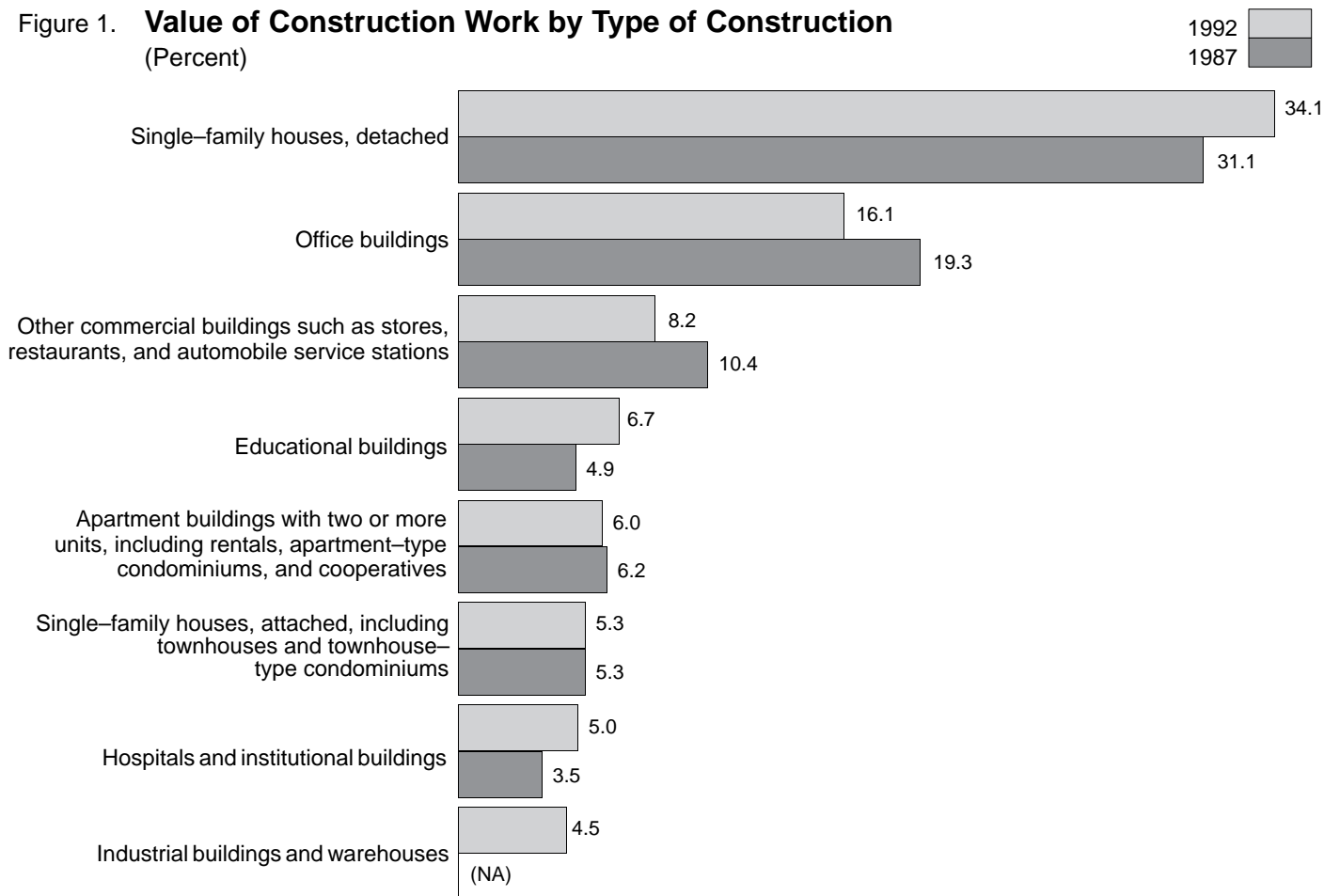


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

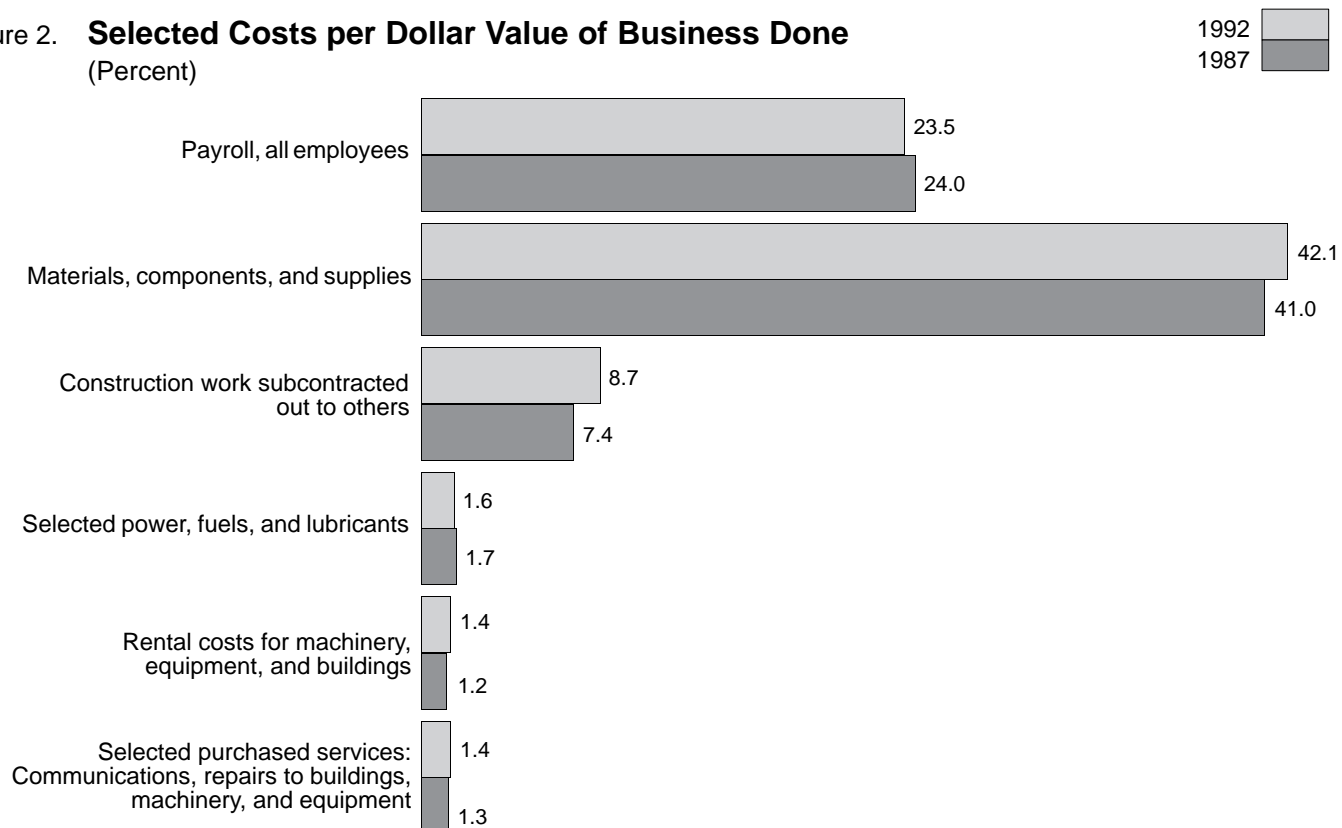


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	10 196	48 948	36 434	1 065 150	723 556	4 427 519	4 032 451	2 165 761	1 980 223
Alabama -----	131	557	422	8 944	6 168	39 293	36 648	20 997	17 567
Alaska -----	30	76	57	2 283	1 693	10 644	9 952	5 005	5 175
Arizona -----	151	872	678	18 693	12 847	76 920	72 460	36 583	37 219
Arkansas -----	45	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(D)
California -----	1 434	8 726	6 558	205 292	139 384	801 215	735 407	400 930	352 984
Colorado -----	182	1 079	844	24 080	16 736	100 406	83 993	46 990	38 733
Connecticut -----	141	745	544	19 507	11 740	80 887	70 031	45 258	30 614
Delaware -----	39	160	123	3 611	2 537	14 327	13 329	6 555	6 775
District of Columbia -----	7	66	47	1 461	865	4 924	3 925	(D)	2 729
Florida -----	448	2 000	1 418	37 649	24 965	184 464	163 264	77 002	87 719
Georgia -----	204	1 016	753	19 042	12 958	97 764	87 071	47 377	42 507
Hawaii -----	61	393	289	11 180	7 729	39 675	38 615	22 428	16 563
Idaho -----	42	82	73	904	831	4 151	3 964	2 166	(D)
Illinois -----	489	2 907	2 144	80 313	55 636	274 873	257 151	147 985	113 455
Indiana -----	234	1 214	785	24 836	13 869	124 294	109 245	56 764	61 003
Iowa -----	124	352	281	6 855	4 803	26 321	25 345	14 084	12 118
Kansas -----	124	505	409	11 066	7 909	41 678	39 543	21 871	18 653
Kentucky -----	123	621	474	10 221	7 557	45 697	44 186	23 037	21 346
Louisiana -----	102	503	374	8 200	5 985	39 962	36 463	18 384	19 190
Maine -----	68	193	144	3 409	2 595	14 674	13 510	9 033	(D)
Maryland -----	265	1 482	1 039	33 564	22 267	142 947	130 338	60 533	70 348
Massachusetts -----	237	833	614	17 847	11 332	105 590	88 427	43 047	50 623
Michigan -----	266	1 214	907	29 678	20 124	126 796	111 445	54 133	59 206
Minnesota -----	159	847	644	(S)	12 573	74 521	68 575	39 096	29 963
Mississippi -----	52	164	131	2 155	1 588	8 107	7 818	4 667	(D)
Missouri -----	262	1 513	1 100	34 179	24 063	120 061	114 746	57 815	59 149
Montana -----	19	44	37	621	560	2 191	2 114	1 293	(S)
Nebraska -----	66	262	211	4 289	3 033	31 555	26 904	13 936	13 663
Nevada -----	54	401	319	8 705	6 245	32 135	30 504	18 510	(S)
New Hampshire -----	48	188	149	4 195	3 245	22 722	21 013	9 682	11 528
New Jersey -----	318	1 613	1 231	42 199	29 134	152 643	139 688	79 688	61 475
New Mexico -----	56	155	125	2 478	1 961	13 717	12 912	6 448	6 546
New York -----	686	2 568	1 944	63 156	44 665	250 779	225 052	131 538	97 875
North Carolina -----	420	1 422	1 140	22 853	17 794	94 948	88 285	47 389	42 198
North Dakota -----	35	127	96	1 925	1 350	*8 630	*8 183	3 318	*4 872
Ohio -----	365	2 156	1 504	50 655	30 852	198 350	181 877	98 976	88 030
Oklahoma -----	78	367	288	6 090	4 544	25 570	23 475	10 928	13 133
Oregon -----	181	670	502	12 999	8 797	56 026	52 029	26 628	26 329
Pennsylvania -----	446	1 899	1 359	41 313	26 774	168 936	158 565	85 283	82 094
Rhode Island -----	43	118	96	2 940	2 508	13 859	13 002	7 922	5 199
South Carolina -----	153	472	354	6 210	4 410	28 329	26 632	14 578	(D)
South Dakota -----	42	127	110	1 617	(S)	4 990	4 853	3 266	1 618
Tennessee -----	146	681	520	12 006	7 964	68 053	60 364	30 877	30 624
Texas -----	417	2 371	1 705	44 178	28 056	225 698	201 305	105 415	106 460
Utah -----	63	242	184	3 820	2 965	24 254	21 085	9 877	11 290
Vermont -----	34	81	65	1 159	865	5 125	4 750	2 415	(S)
Virginia -----	362	1 619	1 180	33 275	21 949	123 301	112 397	58 069	60 399
Washington -----	376	1 681	1 280	34 198	23 042	150 081	136 301	71 846	68 244
West Virginia -----	34	112	87	1 518	1 239	4 583	4 075	2 516	(D)
Wisconsin -----	321	1 223	920	26 297	19 207	98 575	93 334	52 541	44 334
Wyoming -----	17	37	32	409	328	1 507	1 442	(D)	839

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
395 068	2 683 933	62 406	46 221	400 507	44 579	3 651 435	1 880 303	1	1	6	U.S.
2 645	24 608	350	765	5 121	(D)	33 172	(D)	12	13	39	AL
693	5 069	128	(S)	(S)	(S)	(S)	(S)	6	9	(S)	AK
4 460	36 025	(S)	(S)	5 381	685	63 918	25 256	9	10	(S)	AZ
(S)	(S)	*182	*171	(S)	152	6 248	3 713	(S)	(S)	44	AR
65 808	498 322	12 443	6 933	50 771	6 615	623 028	314 083	3	3	12	CA
*16 413	87 009	1 437	1 569	8 841	614	53 022	24 450	6	8	16	CO
10 855	41 370	922	(S)	10 152	1 125	84 472	48 668	13	12	(S)	CT
(S)	3 901	(S)	*68	1 111	137	7 517	4 220	20	10	52	DE
999	3 841	33	—	(D)	93	(D)	2 781	(Z)	(Z)	—	DC
21 200	99 453	2 219	1 459	20 012	1 336	109 423	54 113	6	8	33	FL
10 693	40 956	(S)	(S)	6 749	825	69 643	33 805	15	12	(S)	GA
1 060	26 016	469	*573	3 602	223	20 414	10 516	11	9	45	HI
187	3 297	58	142	835	*74	5 549	*1 840	(Z)	(Z)	(Z)	ID
17 722	177 454	6 790	5 380	33 303	2 597	234 677	128 879	6	4	26	IL
15 049	74 769	1 683	*1 898	11 247	916	72 125	35 044	8	10	57	IN
977	13 574	236	*622	3 242	191	11 905	8 244	10	9	60	IA
2 135	26 761	383	418	2 143	301	27 174	11 141	8	5	7	KS
1 510	22 665	493	*1 005	3 828	282	11 568	7 438	13	16	63	KY
3 499	22 629	573	237	2 525	426	25 769	15 810	14	13	33	LA
1 164	8 476	177	127	2 986	158	12 458	7 682	9	9	20	ME
12 609	103 995	2 818	802	14 572	1 893	169 199	85 219	7	9	27	MD
17 163	69 877	1 405	661	7 489	1 667	157 656	83 572	7	6	18	MA
15 351	80 319	2 016	1 464	10 219	1 018	88 361	45 616	8	5	10	MI
(S)	(S)	621	1 135	(S)	908	69 881	43 781	11	9	39	MN
289	2 995	47	20	849	(S)	(S)	(S)	5	4	17	MS
(S)	105 583	1 421	1 107	16 312	1 140	86 718	48 736	10	12	33	MO
77	(S)	38	70	(S)	(S)	(S)	(S)	(Z)	(Z)	(Z)	MT
*4 651	24 257	196	162	1 970	217	17 496	7 765	13	25	23	NE
(S)	(S)	(S)	*86	(D)	224	14 668	8 136	18	16	60	NV
1 709	13 130	134	196	(S)	166	10 852	5 576	11	10	(Z)	NH
12 955	92 307	2 815	1 137	10 924	2 286	206 531	107 962	4	5	23	NJ
806	9 806	256	611	2 201	156	12 251	4 291	13	15	5	NM
25 727	118 003	3 494	1 422	18 214	3 602	304 169	171 670	4	6	13	NY
6 663	45 569	716	654	8 019	774	46 571	22 317	9	8	12	NC
*447	*9 637	38	151	*1 419	*133	7 706	*3 125	34	43	39	ND
16 472	117 051	2 773	2 275	16 738	1 860	142 268	77 124	4	3	13	OH
2 095	12 628	270	607	2 901	223	13 327	6 641	18	11	7	OK
3 997	40 178	528	*916	6 691	594	53 709	26 435	10	9	57	OR
10 371	95 617	2 318	1 569	18 064	2 368	179 082	94 272	7	5	15	PA
857	7 038	134	*63	513	140	16 202	9 064	4	2	58	RI
1 697	9 224	194	289	4 782	404	21 529	11 325	14	17	16	SC
136	(S)	38	66	616	(S)	(S)	(S)	12	14	(Z)	SD
7 689	45 787	*1 538	607	6 586	656	40 195	16 612	13	15	39	TN
24 394	109 635	3 257	1 412	(S)	2 365	191 229	86 407	6	7	20	TX
*3 169	16 201	432	381	1 605	161	11 672	5 136	11	22	39	UT
(S)	1 947	(S)	(S)	*1 012	(D)	2 805	1 440	18	12	(S)	VT
10 904	87 916	1 626	1 742	17 128	2 074	153 528	75 861	7	6	23	VA
13 781	120 794	1 475	801	9 547	1 045	74 921	37 435	6	5	16	WA
508	2 425	43	*82	620	*100	6 172	*2 748	10	8	41	WV
5 241	53 419	1 308	2 607	11 214	742	50 740	28 165	8	8	26	WI
64	886	36	61	304	(D)	(D)	(D)	5	6	5	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	10 196	8 174	6 673	8 969	1	2	2	3
Proprietors and working partners	5 039	2 862	3 213	6 107	2	4	3	4
All employees**	48 948	44 579	32 349	40 990	1	2	2	1
Construction workers:								
March	35 739	34 283	24 548	31 480	1	2	2	1
May	36 414	34 573	25 008	35 148	1	2	2	2
August	38 680	36 496	25 491	34 284	1	2	2	2
November	34 905	33 311	24 224	33 843	1	2	2	2
Average	36 434	34 666	25 410	33 724	1	2	2	1
Other employees:								
March	12 483	10 085	6 922	7 133	2	2	2	2
May	12 076	9 484	(NA)	(NA)	2	2	(NA)	(NA)
August	11 831	9 656	(NA)	(NA)	2	2	(NA)	(NA)
November	13 667	10 430	(NA)	(NA)	2	2	(NA)	(NA)
Average	12 514	9 914	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	1 065 150	906 162	496 824	453 107	1	1	1	1
Payroll, construction workers	723 556	645 485	364 231	352 246	1	1	2	1
Payroll, other employees	341 594	260 676	132 593	100 861	1	2	2	1
First-quarter payroll, all employees	240 158	206 158	112 677	98 200	2	2	2	1
Fringe benefits, all employees	220 590	186 806	87 259	79 774	2	2	2	1
Legally required expenditures	159 350	141 712	68 918	47 366	2	2	2	1
Voluntary expenditures	61 240	45 094	18 341	32 409	4	2	2	1
Dollar value of business done	4 541 052	3 771 964	1 854 075	1 673 903	1	2	2	1
Value of construction work	4 427 519	3 651 435	1 793 756	1 616 932	1	2	2	1
Value of construction work subcontracted in from others	2 683 933	1 626 503	852 754	785 073	3	3	2	2
Other business receipts	113 533	120 529	60 319	56 971	8	5	5	5
Net value of construction work†	4 032 451	3 371 200	1 697 628	1 547 860	1	1	2	1
Value added††	2 165 761	1 880 303	913 316	823 659	1	1	2	1
Selected costs	2 375 291	1 891 661	940 758	850 244	2	2	2	2
Materials, components, and supplies	1 909 587	1 548 341	806 949	749 792	2	2	2	2
Construction work subcontracted out to others	395 068	280 234	96 128	69 072	4	5	3	3
Selected power, fuels, and lubricants	70 636	63 085	37 680	31 380	2	2	3	3
Electricity	12 968	11 249	6 210	4 122	2	3	4	3
Natural and manufactured gas	3 474	2 204	1 886	2 070	4	4	5	28
Gasoline and diesel fuel	51 915	46 453	27 464	22 495	2	2	3	2
On highway use	49 745	43 785	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use	2 170	2 667	(NA)	(NA)	7	4	(NA)	(NA)
Other, including lubricating oils and greases	2 279	3 178	2 119	2 694	6	5	7	6
Rental cost for machinery, equipment, and buildings	62 406	45 168	18 142	11 933	4	3	3	3
For machinery and equipment	10 558	7 544	3 628	3 049	8	5	5	6
For buildings	51 848	37 624	14 514	8 884	4	4	4	3
Selected purchased services	62 447	47 845	23 186	24 120	3	2	3	3
Communication services	33 147	27 021	13 143	12 042	3	2	3	3
Repairs to buildings and other structures	3 712	4 859	2 184	1 747	8	6	6	4
Repairs to machinery and equipment	25 587	15 963	7 858	10 332	4	3	3	4
Ownership of construction projects:								
Value of construction work	4 427 519	3 651 435	1 793 756	1 616 932	1	2	2	1
Government owned	606 667	360 305	204 766	130 594	6	5	11	4
Federal	167 939	103 708	(NA)	(NA)	8	7	(NA)	(NA)
State and local	438 728	256 597	(NA)	(NA)	6	6	(NA)	(NA)
Privately owned	3 820 852	3 291 129	1 588 989	1 486 338	2	2	2	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	367 651	253 237	4	6
Capital expenditures, other than land -----	46 221	41 437	6	5
New -----	33 741	34 385	6	5
Used -----	12 480	7 052	10	10
Retirements and disposition of depreciable assets -----	13 365	8 519	9	12
End-of-year gross book value of depreciable assets -----	400 507	286 154	3	6
Depreciation charges during year -----	43 548	34 555	4	5
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	75 657	112 467	6	12
Capital expenditures, other than land -----	6 412	5 954	13	10
New buildings and other structures -----	2 588	4 175	11	11
Used buildings and other structures -----	3 824	1 779	20	13
Retirements and disposition of depreciable assets -----	1 893	2 293	24	31
End-of-year gross book value of depreciable assets -----	80 176	116 128	6	11
Depreciation charges during year -----	5 544	8 443	9	9
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	291 995	140 769	4	4
Capital expenditures, other than land -----	39 809	35 482	6	5
New machinery and equipment, including automobiles and trucks -----	31 153	30 210	7	5
New automobiles and trucks, intended primarily for highway use -----	16 037	21 367	7	6
Used machinery and equipment, including automobiles and trucks -----	8 656	5 272	11	13
Retirements and disposition of depreciable assets -----	11 472	6 226	9	10
End-of-year gross book value of depreciable assets -----	320 331	170 026	4	4
Depreciation charges during year -----	38 004	26 112	4	5

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	10 196	1
Value of construction work	4 427 519	1
Establishments with inventories:		
Number	3 238	2
Value of construction work	2 730 183	1
Inventories ¹ :		
End of 1992, materials and supplies	127 315	5
End of 1991, materials and supplies	120 042	4
Establishments with no inventories:		
Number	2 785	3
Value of construction work	736 271	4
Establishments not reporting:		
Number	4 193	2
Value of construction work	961 065	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	10 196	7 267	1 733	809	314	63	10	—	—	—
All employees** -----	48 948	12 419	11 291	10 764	8 974	4 102	1 399	—	—	—
Payroll, all employees -----	1 065 150	186 553	229 953	252 594	232 697	118 182	45 171	—	—	—
Dollar value of business done -----	4 541 052	988 536	965 019	1 051 982	951 282	437 591	146 641	—	—	—
Value of construction work -----	4 427 519	965 289	930 988	1 030 297	936 979	418 746	145 221	—	—	—
Net value of construction work† -----	4 032 451	865 941	837 509	938 007	857 503	393 197	140 295	—	—	—
Value added†† -----	2 165 761	493 942	464 858	511 804	407 569	210 635	76 953	—	—	—
Cost of materials, components, supplies, and fuels -----	1 980 223	395 247	406 682	447 889	464 236	201 407	64 762	—	—	—
Cost of construction work subcontracted out to others -----	395 068	99 348	93 479	92 290	79 476	25 549	4 926	—	—	—
Rental cost for machinery, equipment, and buildings -----	62 406	12 194	14 934	14 941	13 384	4 722	2 231	—	—	—
Capital expenditures, other than land -----	46 221	16 078	10 150	8 289	7 323	3 179	1 201	—	—	—
End-of-year gross book value of depreciable assets -----	400 507	105 522	86 298	77 819	81 358	37 225	12 284	—	—	—
1987										
All employees** -----	44 579	10 143	8 652	9 464	9 370	4 528	2 420	(D)	—	—
Value of construction work -----	3 651 435	748 924	626 273	750 085	838 073	688 078	(D)	(D)	—	—
Value added†† -----	1 880 303	381 159	319 082	377 839	432 484	231 333	138 404	(D)	—	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	3	4	4	2	(Z)	(Z)	—	—	—
Net value of construction work† -----	1	3	4	4	2	(Z)	(Z)	—	—	—
Capital expenditures, other than land -----	6	11	16	10	2	(Z)	(Z)	—	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	10 196	(S)	(S)	2 224	2 612	1 454	1 071	654	166	114	22
All employees** -----	48 948	(S)	(S)	3 308	7 077	7 542	8 485	9 809	4 815	4 473	1 721
Payroll, all employees -----	1 065 150	(S)	(S)	39 538	105 342	134 649	183 566	244 703	127 572	149 849	66 706
Dollar value of business done -----	4 541 052	(S)	(S)	158 394	418 503	514 082	735 759	1 001 204	564 885	762 751	328 773
Value of construction work -----	4 427 519	(S)	(S)	156 985	413 844	497 873	714 322	971 620	556 014	744 924	315 588
Net value of construction work† -----	4 032 451	(S)	(S)	151 335	393 787	464 723	644 393	882 023	500 800	663 188	277 744
Value added†† -----	2 165 761	(S)	(S)	100 055	237 388	271 376	367 878	467 675	263 758	302 824	118 022
Cost of materials, components, supplies, and fuels -----	1 980 223	(S)	(S)	52 689	161 058	209 556	297 951	443 932	245 913	378 191	172 907
Cost of construction work subcontracted out to others -----	395 068	(S)	(S)	5 650	20 057	33 150	69 930	89 596	55 214	81 736	37 844
Rental cost for machinery, equipment, and buildings -----	62 406	(S)	(S)	1 519	4 927	7 368	14 049	12 898	6 723	10 293	4 202
Capital expenditures, other than land -----	46 221	(S)	(S)	2 277	7 170	8 122	8 656	7 980	3 665	5 549	2 168
End-of-year gross book value of depreciable assets -----	400 507	(S)	(S)	19 970	46 261	57 859	66 786	79 372	41 408	55 021	26 989
1987											
All employees** -----	44 579	(S)	(S)	(S)	5 954	6 177	7 499	8 950	4 671	3 583	3 124
Value of construction work -----	3 651 435	(S)	(S)	(S)	300 873	413 322	574 090	777 075	510 608	496 802	414 930
Value added†† -----	1 880 303	(S)	(S)	(S)	178 515	215 740	296 298	385 655	253 318	221 443	214 393
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	5	5	5	5	3	2	1	(Z)
Net value of construction work† -----	1	(S)	(S)	4	4	5	5	4	3	3	(Z)
Capital expenditures, other than land -----	6	(S)	(S)	18	12	20	17	10	4	2	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	4 427 519	1 861 638	1 521 101	621 841	1	2	2	3
Building construction	3 994 190	1 856 032	1 518 463	619 695	1	2	2	3
Single-family houses	1 742 927	959 515	521 982	261 430	2	2	3	5
Single-family houses, detached	1 507 732	835 652	454 869	217 211	2	3	3	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	235 195	123 863	67 114	44 219	5	4	13	11
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	265 513	90 948	114 589	59 976	5	5	7	11
Other residential buildings, including hotels, motels, and tourist cabins	70 289	18 966	33 022	18 300	7	8	10	15
Hotels, motels, and tourist cabins	50 018	14 762	23 805	11 451	6	7	7	12
Other residential buildings	20 271	4 205	9 217	6 849	19	25	28	36
Office buildings	711 640	283 842	341 707	86 091	3	4	4	5
Other commercial buildings such as stores, restaurants, and automobile service stations	361 172	169 077	152 042	40 053	4	8	5	5
Industrial buildings and warehouses	200 315	62 257	78 188	59 870	7	7	13	10
Industrial buildings	168 659	56 505	58 470	53 684	6	7	7	10
Warehouses	31 657	5 752	*19 718	6 186	28	16	44	19
Religious buildings	59 424	21 451	27 442	10 530	6	7	5	10
Educational buildings	296 690	138 989	113 773	43 928	4	6	5	7
Hospitals and institutional buildings	221 048	82 414	111 452	27 182	5	9	4	5
Amusement, social, and recreational buildings, indoors	50 002	21 647	18 816	9 539	5	5	2	22
Other nonresidential buildings	15 171	6 926	5 450	2 795	14	13	17	15
Nonbuilding construction	10 390	5 606	2 637	2 146	10	16	9	13
Construction work, n.s.k.	422 939	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
1987								
Value of construction work	3 651 435	1 926 895	958 811	493 661	2	2	3	3
Building construction	3 349 903	1 917 838	950 515	481 549	2	2	3	3
Single-family houses	1 327 792	806 437	350 490	170 865	2	3	4	5
Single-family houses, detached	1 134 442	685 432	298 046	150 964	2	3	4	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	193 349	121 004	52 444	19 900	6	6	10	8
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	226 756	130 755	51 905	44 095	6	8	15	9
Other residential buildings, including hotels, motels, and tourist cabins	132 678	60 036	37 750	34 892	6	6	7	17
Hotels, motels, and tourist cabins	90 948	45 199	23 070	22 679	7	7	6	19
Other residential buildings	41 730	14 837	14 679	12 213	13	7	14	32
Office buildings	702 996	418 698	214 827	69 470	4	4	7	4
Other commercial buildings such as stores, restaurants, and automobile service stations	378 892	217 015	106 800	55 076	4	4	7	11
Industrial buildings	149 642	86 031	29 002	34 608	6	7	5	13
Religious buildings	50 545	21 642	19 871	9 031	6	6	10	13
Educational buildings	179 170	88 750	67 382	23 037	6	8	6	13
Hospitals and institutional buildings	126 673	50 089	55 429	21 154	3	5	3	7
Amusement, social, and recreational buildings, indoors	36 956	17 938	9 227	9 791	12	18	9	23
Other nonresidential buildings	37 803	20 447	7 832	*9 530	24	12	19	57
Nonbuilding construction	29 465	9 057	8 296	12 111	14	7	19	28
Construction work, n.s.k.	272 067	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments -----	10 196	48 948	1 065 150	4 427 519	2 740 638	4 032 451	2 165 761	395 068	1	1	4
Establishments not specializing by type -----	1 644	11 229	281 297	1 203 522	(NA)	1 094 853	553 525	108 669	3	3	5
Establishments specializing 51 percent or more -----	8 552	37 719	783 853	3 223 997	2 740 638	2 937 598	1 612 235	286 399	2	2	5
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	4 779	18 293	368 003	1 509 954	1 272 760	1 371 555	734 495	138 398	2	3	6
Establishments with —											
100 percent specialization -----	1 594	4 778	88 202	363 020	363 020	334 694	186 110	28 326	6	6	12
90 to 99 percent specialization -----	1 199	4 566	93 580	374 130	348 886	347 264	189 282	26 866	5	4	11
80 to 89 percent specialization -----	731	2 865	55 574	254 086	211 094	228 738	111 413	25 347	7	9	16
70 to 79 percent specialization -----	(S)	3 584	75 979	287 090	208 960	253 030	133 837	34 060	6	5	14
60 to 69 percent specialization -----	385	1 977	44 496	193 690	120 037	173 440	95 823	20 250	8	10	18
51 to 59 percent specialization -----	89	523	10 172	37 938	20 762	34 389	18 030	*3 549	16	17	42
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	258	996	20 411	85 312	71 017	76 285	43 765	9 027	13	14	21
Establishments with —											
100 percent specialization -----	113	424	7 337	30 131	30 131	28 734	16 545	*1 397	25	30	46
90 to 99 percent specialization -----	33	126	3 019	14 720	13 414	12 136	7 300	2 585	26	24	37
80 to 89 percent specialization -----	26	103	2 158	5 882	4 813	(D)	4 036	(D)	37	32	(D)
70 to 79 percent specialization -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
60 to 69 percent specialization -----	*20	127	3 267	10 193	6 340	(D)	5 506	(D)	34	31	(D)
51 to 59 percent specialization -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type -----	232	1 512	34 640	146 377	116 650	130 812	71 060	15 565	8	9	20
Establishments with —											
100 percent specialization -----	121	428	8 512	39 088	39 088	33 879	19 758	5 209	18	19	32
90 to 99 percent specialization -----	*21	*103	*1 556	*5 459	*5 045	*5 447	*3 347	(S)	42	41	(S)
80 to 89 percent specialization -----	19	310	9 952	45 489	37 969	41 170	18 143	4 319	9	13	32
70 to 79 percent specialization -----	28	144	3 148	*14 313	*10 441	*11 695	5 963	(S)	29	46	(S)
60 to 69 percent specialization -----	(S)	280	6 484	24 113	14 654	21 433	12 791	2 680	20	23	35
51 to 59 percent specialization -----	*6	247	4 989	17 915	9 453	17 189	11 059	727	7	14	28
OFFICE BUILDINGS											
All establishments specializing in type -----	407	4 306	119 261	506 446	407 340	454 396	233 968	52 049	5	4	9
Establishments with —											
100 percent specialization -----	112	1 175	29 207	111 010	111 010	104 484	55 684	6 526	12	10	25
90 to 99 percent specialization -----	(S)	(S)	20 437	102 313	95 300	92 674	39 414	9 638	(S)	12	21
80 to 89 percent specialization -----	45	638	14 691	65 572	53 623	(D)	30 448	(D)	10	15	(D)
70 to 79 percent specialization -----	89	773	22 631	91 902	66 407	77 784	40 069	14 119	10	9	22
60 to 69 percent specialization -----	48	632	19 787	88 274	55 538	76 055	40 323	12 219	5	7	11
51 to 59 percent specialization -----	13	341	12 509	47 375	25 461	(D)	28 031	(D)	7	3	(D)
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	305	2 152	47 512	179 926	151 559	161 324	101 134	*18 602	8	9	48
Establishments with —											
100 percent specialization -----	(S)	708	14 741	62 013	62 013	50 445	31 622	(S)	12	20	(S)
90 to 99 percent specialization -----	33	301	8 635	30 398	28 587	28 573	19 105	1 825	22	15	33
80 to 89 percent specialization -----	34	268	5 799	20 338	16 565	19 557	12 696	781	16	15	25
70 to 79 percent specialization -----	46	397	7 859	31 445	23 189	29 882	17 613	1 562	24	22	16
60 to 69 percent specialization -----	45	300	6 155	23 778	14 686	21 697	11 468	(S)	19	17	(S)
51 to 59 percent specialization -----	*15	178	4 322	11 953	6 520	11 169	8 630	785	28	17	(Z)
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	163	1 351	33 333	106 663	91 520	100 888	65 422	5 776	11	9	15
Establishments with —											
100 percent specialization -----	68	420	8 750	26 182	26 182	25 152	18 364	1 030	24	19	27
90 to 99 percent specialization -----	18	298	8 599	26 674	24 941	25 451	16 720	1 223	20	17	32
80 to 89 percent specialization -----	27	202	6 936	25 665	21 660	(D)	14 897	(D)	22	15	(D)
70 to 79 percent specialization -----	(S)	201	3 880	(S)	(S)	(S)	(S)	(S)	36	(S)	(S)
60 to 69 percent specialization -----	22	230	5 168	12 977	7 939	(D)	8 795	(D)	23	13	(D)
51 to 59 percent specialization -----	—	—	—	—	—	—	—	—	—	—	—
EDUCATIONAL BUILDINGS											
All establishments specializing in type -----	173	1 491	34 098	144 808	109 725	137 284	65 386	7 523	11	10	14
Establishments with —											
100 percent specialization -----	29	130	2 884	12 036	12 036	11 221	5 150	815	25	26	27
90 to 99 percent specialization -----	30	197	5 661	24 456	22 621	23 519	12 197	937	26	27	29
80 to 89 percent specialization -----	33	370	8 138	30 901	25 253	29 348	12 784	*1 553	23	20	51
70 to 79 percent specialization -----	19	221	5 197	23 796	17 130	21 804	10 639	1 992	16	14	4
60 to 69 percent specialization -----	55	485	10 406	47 770	29 305	45 829	22 174	1 941	23	22	32
51 to 59 percent specialization -----	6	86	1 813	5 848	3 380	5 563	2 443	285	34	23	31

17-10 FLOOR LAYING AND FLOOR WORK, N.E.C.

CONSTRUCTION—INDUSTRY SERIES

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	10 196	36 434	35 739	36 414	38 680	34 905	1	1	1	1	1	1
Alabama	131	422	400	414	453	421	13	12	11	14	13	13
Alaska	30	57	36	59	(S)	68	12	8	9	15	(S)	4
Arizona	151	678	644	657	694	718	8	8	9	9	9	8
Arkansas	45	(S)	(S)	(S)	(S)	(S)	15	(S)	(S)	(S)	(S)	(S)
California	1 434	6 558	6 511	6 608	6 910	6 204	3	3	3	3	3	4
Colorado	182	844	817	788	900	870	6	6	6	6	8	7
Connecticut	141	544	527	585	566	499	7	14	14	15	13	12
Delaware	39	123	119	114	132	125	15	23	21	22	22	24
District of Columbia	7	47	45	45	48	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Florida	448	1 418	1 389	1 421	1 483	1 378	6	6	6	6	6	6
Georgia	204	753	684	794	795	741	9	16	13	16	18	18
Hawaii	61	289	302	280	281	292	8	12	12	12	11	12
Idaho	42	73	69	70	82	70	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Illinois	489	2 144	1 967	2 165	2 266	2 178	6	6	6	7	7	7
Indiana	234	785	750	773	872	744	6	9	9	10	9	9
Iowa	124	281	297	294	297	237	12	11	11	11	12	11
Kansas	124	409	411	420	434	371	9	9	9	11	10	9
Kentucky	123	474	429	490	533	445	13	12	12	12	12	12
Louisiana	102	374	385	358	382	371	12	16	16	16	15	16
Maine	68	144	149	149	150	129	15	12	14	11	12	13
Maryland	265	1 039	1 068	1 063	1 100	926	8	8	7	7	7	9
Massachusetts	237	614	653	635	626	544	8	8	8	8	9	9
Michigan	266	907	861	869	1 018	879	6	9	9	9	9	9
Minnesota	159	644	596	628	738	615	11	11	13	11	10	12
Mississippi	52	131	146	139	124	116	9	6	5	3	6	3
Missouri	262	1 100	1 086	1 067	1 168	1 079	9	10	11	11	10	10
Montana	19	37	33	35	36	43	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Nebraska	66	211	205	221	227	189	15	12	14	12	12	13
Nevada	54	319	315	335	338	288	12	21	20	22	23	19
New Hampshire	48	149	128	156	157	156	18	12	13	10	11	11
New Jersey	318	1 231	1 194	1 258	1 318	1 153	6	5	5	5	5	4
New Mexico	56	125	117	114	134	134	9	16	17	17	14	15
New York	686	1 944	1 929	1 995	2 027	1 825	5	4	4	4	4	6
North Carolina	420	1 140	1 135	1 156	1 231	1 037	6	9	8	8	8	9
North Dakota	35	96	92	93	97	101	20	35	35	39	33	33
Ohio	365	1 504	1 495	1 509	1 591	1 420	4	4	4	4	5	4
Oklahoma	78	288	238	264	348	301	16	20	19	17	24	21
Oregon	181	502	473	506	525	504	7	10	11	13	10	11
Pennsylvania	446	1 359	1 272	1 336	1 473	1 356	4	7	8	7	7	9
Rhode Island	43	96	81	103	111	87	7	5	5	4	4	5
South Carolina	153	354	352	345	375	344	7	16	16	15	15	19
South Dakota	42	110	(S)	(S)	90	137	18	14	(S)	(S)	17	5
Tennessee	146	520	514	538	541	486	11	16	15	15	17	17
Texas	417	1 705	(S)	1 497	1 708	1 580	6	6	(S)	7	7	7
Utah	63	184	179	170	195	193	5	11	14	12	12	11
Vermont	34	65	69	68	64	59	22	23	33	22	24	25
Virginia	362	1 180	1 092	1 198	1 285	1 144	6	6	6	7	7	7
Washington	376	1 280	1 251	1 328	1 354	1 186	5	6	6	6	6	7
West Virginia	34	87	68	77	108	94	6	9	12	11	7	8
Wisconsin	321	920	873	930	1 022	853	7	8	8	8	8	8
Wyoming	17	32	24	31	40	34	11	6	6	4	5	4

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	4 427 519	10 166	4 219 427	2 199	208 092	3 651 435	21.3	1	1	4
Alabama -----	38 550	131	36 947	44	1 603	32 142	19.9	12	12	25
Alaska -----	(D)	(S)	(D)	1	(D)	8 728	(D)	(D)	(D)	(D)
Arizona -----	75 298	151	74 383	*23	*914	64 330	17.0	11	11	40
Arkansas -----	(S)	(S)	(S)	*16	755	8 284	(S)	(S)	(S)	4
California -----	803 060	1 434	799 956	34	3 105	622 160	29.1	3	3	17
Colorado -----	103 414	182	100 038	25	3 376	54 337	90.3	11	12	36
Connecticut -----	79 773	139	76 249	61	3 524	82 371	-3.2	12	12	27
Delaware -----	15 002	39	13 535	37	1 467	9 020	66.3	11	12	11
District of Columbia -----	16 973	7	2 920	67	14 053	25 939	-34.6	8	(Z)	10
Florida -----	186 582	(S)	181 479	48	5 104	117 688	58.5	8	8	21
Georgia -----	97 529	204	92 898	80	4 631	75 222	29.7	13	13	21
Hawaii -----	(D)	61	(D)	*3	(D)	(D)	(D)	(D)	(D)	(D)
Idaho -----	6 096	(S)	4 055	6	*2 040	*5 728	6.4	22	(Z)	65
Illinois -----	283 274	489	271 705	140	11 569	225 217	25.8	4	4	16
Indiana -----	121 099	234	114 756	88	6 343	70 039	72.9	11	11	11
Iowa -----	26 917	124	25 119	29	1 798	13 833	94.6	9	10	2
Kansas -----	39 463	121	34 937	42	4 526	(D)	(D)	7	6	28
Kentucky -----	48 466	123	40 420	79	8 046	13 365	262.6	13	15	14
Louisiana -----	(D)	102	(D)	12	(D)	25 994	(D)	(D)	(D)	(D)
Maine -----	17 151	68	13 656	14	3 495	19 936	-14.0	7	8	4
Maryland -----	131 876	263	123 050	77	8 826	110 114	19.8	9	9	4
Massachusetts -----	105 061	229	96 278	58	8 783	146 666	-28.4	5	6	20
Michigan -----	129 899	(S)	124 827	77	5 072	90 148	44.1	6	6	13
Minnesota -----	77 130	(S)	73 870	36	*3 260	68 091	13.3	9	9	68
Mississippi -----	10 622	52	7 343	38	3 278	6 655	59.6	11	2	34
Missouri -----	114 427	260	110 154	35	4 274	86 546	32.2	11	11	5
Montana -----	2 526	(S)	2 150	*14	*376	*6 352	-60.2	8	(Z)	55
Nebraska -----	30 420	66	29 733	9	*687	(D)	(D)	27	29	66
Nevada -----	35 817	(S)	31 974	*19	3 842	14 992	138.9	14	16	26
New Hampshire -----	19 241	45	17 382	58	1 858	15 658	22.9	9	10	23
New Jersey -----	139 135	(S)	128 469	108	10 666	165 016	-15.7	6	6	9
New Mexico -----	12 903	56	12 449	*9	(S)	13 872	-7.0	13	13	(S)
New York -----	263 823	686	241 682	83	22 141	350 797	-24.8	6	6	4
North Carolina -----	95 410	420	92 226	52	3 183	50 532	88.8	8	8	22
North Dakota -----	6 085	35	5 859	*14	*226	3 568	70.5	26	27	47
Ohio -----	184 037	364	178 490	54	5 547	133 630	37.7	3	3	33
Oklahoma -----	25 181	78	24 945	*5	236	12 979	94.0	12	12	36
Oregon -----	63 795	181	54 559	33	9 236	53 139	20.1	8	9	12
Pennsylvania -----	170 974	446	162 708	107	8 265	177 501	-3.7	5	5	14
Rhode Island -----	14 772	43	13 680	30	1 091	19 184	-23.0	2	2	9
South Carolina -----	28 749	153	26 360	50	2 389	20 394	41.0	16	17	11
South Dakota -----	5 194	(S)	4 833	7	360	*6 663	-22.1	13	14	13
Tennessee -----	66 467	146	64 572	56	1 894	41 840	58.9	15	16	6
Texas -----	226 261	417	224 800	22	1 462	189 842	19.2	7	7	12
Utah -----	19 901	63	19 895	(S)	(S)	11 071	79.8	21	21	(S)
Vermont -----	5 684	34	5 014	18	670	(D)	(D)	10	11	28
Virginia -----	120 418	362	107 263	120	13 155	179 894	-33.1	6	6	11
Washington -----	142 140	376	140 692	28	1 449	75 624	88.0	5	5	29
West Virginia -----	6 897	34	4 204	54	2 692	*6 938	-6	11	7	26
Wisconsin -----	96 791	321	94 706	62	2 086	52 180	85.5	8	9	16
Wyoming -----	2 020	17	1 507	11	*513	(D)	(D)	13	6	49

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business -----	4 541 052	3 771 964	1	2
SPECIAL TRADE CONTRACTORS				
Acoustical contractor -----	33 008	26 247	13	8
Carpentry contractor -----	31 289	18 844	9	15
Carpet laying or removal contractor -----	2 068 260	1 737 414	2	2
Computer floor installation contractor -----	150 060	235 668	10	10
Flooring contractor, wood -----	978 749	639 441	3	3
Linoleum, asphalt resilient or vinyl tile installation contractor -----	863 267	641 933	2	3
Tile setting contractor -----	91 079	68 254	6	3
Other construction activities -----	128 940	147 853	8	8
OTHER BUSINESS ACTIVITIES				
Retail trade -----	71 312	76 090	10	8
Other business activities -----	37 175	43 632	13	(NA)
Kind of business activity, n.s.k. -----	87 912	136 588	10	10

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	4.8	5.5	1
Number of construction workers	3.6	4.2	1
Number of all other employees	1.2	1.2	1
Payroll, all employees \$1,000 ..	104.5	110.9	1
Payroll, construction workers do ..	71.0	79.0	1
Payroll, other employees do ..	33.5	31.9	1
Dollar value of business done do ..	445.4	461.5	1
Value of construction work do ..	434.2	446.7	1
Cost of materials, components, supplies, and fuels do ..	194.2	197.1	1
Construction work subcontracted to others do ..	38.7	34.3	4
Rental cost for machinery, equipment, and buildings do ..	6.1	5.5	4
Capital expenditures, other than land do ..	4.5	5.1	6
Gross book value of depreciable assets do ..	39.3	35.0	4
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	21.8	20.3	1
Dollar value of business done do ..	92.8	84.6	1
Value added†† do ..	44.2	42.2	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	19.9	18.6	1
Value of construction work do ..	121.5	105.3	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	27.3	26.3	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.241	.248	1
Cost of materials, components, supplies, and fuels do ..	.447	.441	1
Cost of construction work subcontracted out to others do ..	.089	.077	3
Value of construction work subcontracted in from others do ..	.606	.445	2
Rental cost for machinery, equipment, and buildings do ..	.014	.012	4

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	4.8	21.8	121.5	.241	.447	.089	.606	.014
Alabama -----	4.3	16.1	93.1	.228	.447	.067	.626	.009
Alaska -----	2.6	30.0	186.7	.214	.486	.065	.476	.012
Arizona -----	5.8	21.4	113.5	.243	.484	.058	.468	(S)
Arkansas -----	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(S)
California -----	6.1	23.5	122.2	.256	.441	.082	.622	.016
Colorado -----	5.9	22.3	119.0	.240	.386	*.163	.867	.014
Connecticut -----	5.3	26.2	148.7	.241	.378	.134	.511	.011
Delaware -----	4.1	22.6	116.5	.252	.473	(S)	.551	(S)
District of Columbia -----	9.4	22.1	104.8	.297	.554	.203	.780	.007
Florida -----	4.5	18.8	130.1	.204	.476	.115	.539	.012
Georgia -----	5.0	18.7	129.8	.195	.435	.109	.419	(S)
Hawaii -----	6.5	28.4	137.3	.282	.417	.027	.656	.012
Idaho -----	2.0	11.0	56.9	.218	(D)	.045	.794	.014
Illinois -----	6.0	27.6	128.2	.292	.413	.064	.646	.025
Indiana -----	5.2	20.5	158.3	.200	.491	.121	.602	.014
Iowa -----	2.8	19.5	93.7	.260	.460	.037	.516	.009
Kansas -----	4.1	21.9	101.9	.266	.448	.051	.642	.009
Kentucky -----	5.0	16.5	96.4	.224	.467	.033	.496	.011
Louisiana -----	5.0	16.3	106.9	.205	.480	.088	.566	.014
Maine -----	2.8	17.7	101.9	.232	(D)	.079	.578	.012
Maryland -----	5.6	22.6	137.6	.235	.492	.088	.728	.020
Massachusetts -----	3.5	21.4	172.0	.169	.479	.163	.662	.013
Michigan -----	4.6	24.4	139.8	.234	.467	.121	.633	.016
Minnesota -----	5.3	(S)	115.7	(S)	.402	(S)	(S)	.008
Mississippi -----	3.2	13.1	61.9	.266	(D)	.036	.369	.006
Missouri -----	5.8	22.6	109.1	.285	.493	(S)	.879	.012
Montana -----	2.3	14.1	59.2	.283	(S)	.035	(S)	.017
Nebraska -----	4.0	16.4	149.6	.136	.433	.147	.769	.006
Nevada -----	7.5	21.7	100.7	.271	(S)	(S)	(S)	(S)
New Hampshire -----	3.9	22.3	152.5	.185	.507	.075	.578	.006
New Jersey -----	5.1	26.2	124.0	.276	.403	.085	.605	.018
New Mexico -----	2.8	16.0	109.7	.181	.477	.059	.715	.019
New York -----	3.7	24.6	129.0	.252	.390	.103	.471	.014
North Carolina -----	3.4	16.1	83.3	.241	.444	.070	.480	.008
North Dakota -----	3.6	15.2	89.9	.223	.565	.052	(S)	.004
Ohio -----	5.9	23.5	131.9	.255	.444	.083	.590	.014
Oklahoma -----	4.7	16.6	88.8	.238	.514	.082	.494	.011
Oregon -----	3.7	19.4	111.6	.232	.470	.071	.717	.009
Pennsylvania -----	4.3	21.8	124.3	.245	.486	.061	.566	.014
Rhode Island -----	2.7	24.9	144.4	.212	.375	.062	.508	.010
South Carolina -----	3.1	13.2	80.0	.219	(D)	.060	.326	.007
South Dakota -----	3.0	12.7	45.4	.324	.324	.027	(S)	.008
Tennessee -----	4.7	17.6	130.9	.176	.450	.113	.673	*.023
Texas -----	5.7	18.6	132.4	.196	.472	.108	.486	.014
Utah -----	3.9	15.8	131.8	.157	.465	.131	.668	.018
Vermont -----	2.4	14.3	78.8	.226	(S)	(S)	.380	(S)
Virginia -----	4.5	20.6	104.5	.270	.490	.088	.713	.013
Washington -----	4.5	20.3	117.3	.228	.455	.092	.805	.010
West Virginia -----	3.3	13.6	52.7	.331	(D)	.111	.529	.009
Wisconsin -----	3.8	21.5	107.1	.267	.450	.053	.542	.013
Wyoming -----	2.2	11.1	47.1	.271	.557	.043	.588	.024

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

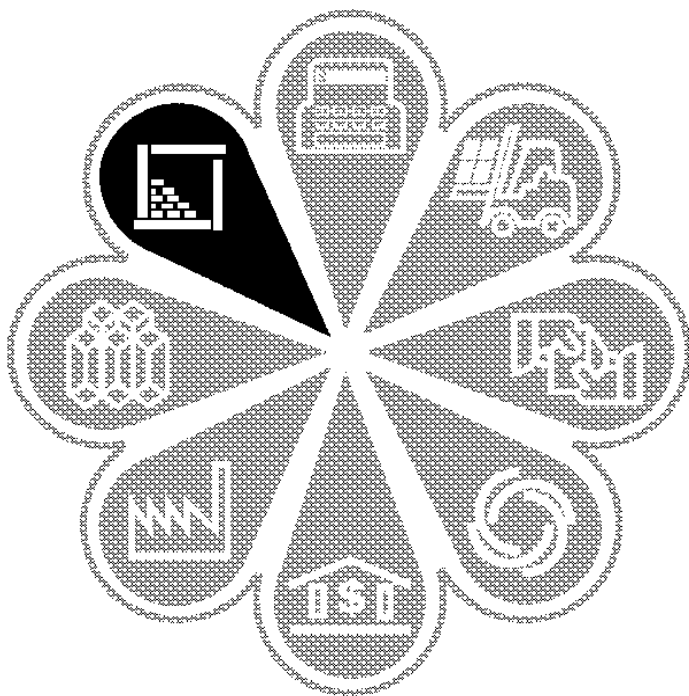
Census of Construction Industries

CC92-I-18

INDUSTRY SERIES

Roofing, Siding, and Sheet Metal Work Special Trade Contractors

Industry 1761



1992

Census of

Construction Industries

CC92-I-18

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Issued April 1995



U.S. Department of Commerce

Ronald H. Brown, Secretary

David J. Barram, Deputy Secretary

Economics and Statistics Administration

Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS

Martha Farnsworth Riche, Director

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This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Juliana Van Berkum**, **Susan L. Hostetter**, **Doris M. Kling**, **Carolyn J. Stone**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke**. Under the direction of **C. Lloyd Anderson**, the Systems Support Staff maintained the small computers and assisted in the management of computer output.

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Administration**

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Roofing, Siding, and Sheet Metal Work Special Trade Contractors

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Summary of Findings

Establishments classified in this industry are primarily engaged in the installation of roofing (including roof spraying, painting, or coating), siding and sheet metal work. Sheet metal work performed by plumbing, heating, and air-conditioning contractors in conjunction with the installation of plumbing, heating, and air-conditioning equipment is classified in Industry 1711, Plumbing, Heating, and Air-Conditioning Special Trade Contractors. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$17.0 billion in total dollar value of business. Of this amount, \$16.8 billion were for the value of construction work. These establishments paid out \$6.6 billion for materials, components, and supplies and \$1.2 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$299 million. Value added for 1992 was \$8.9 billion.

There were 27,569 establishments with total employment averaging 215,545 during the year. Total payroll for 1992 was \$4.6 billion.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Larger establishments with 20 employees or more, while representing only 9 percent of the total number of employer establishments in this industry accounted for 52 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1992
1987

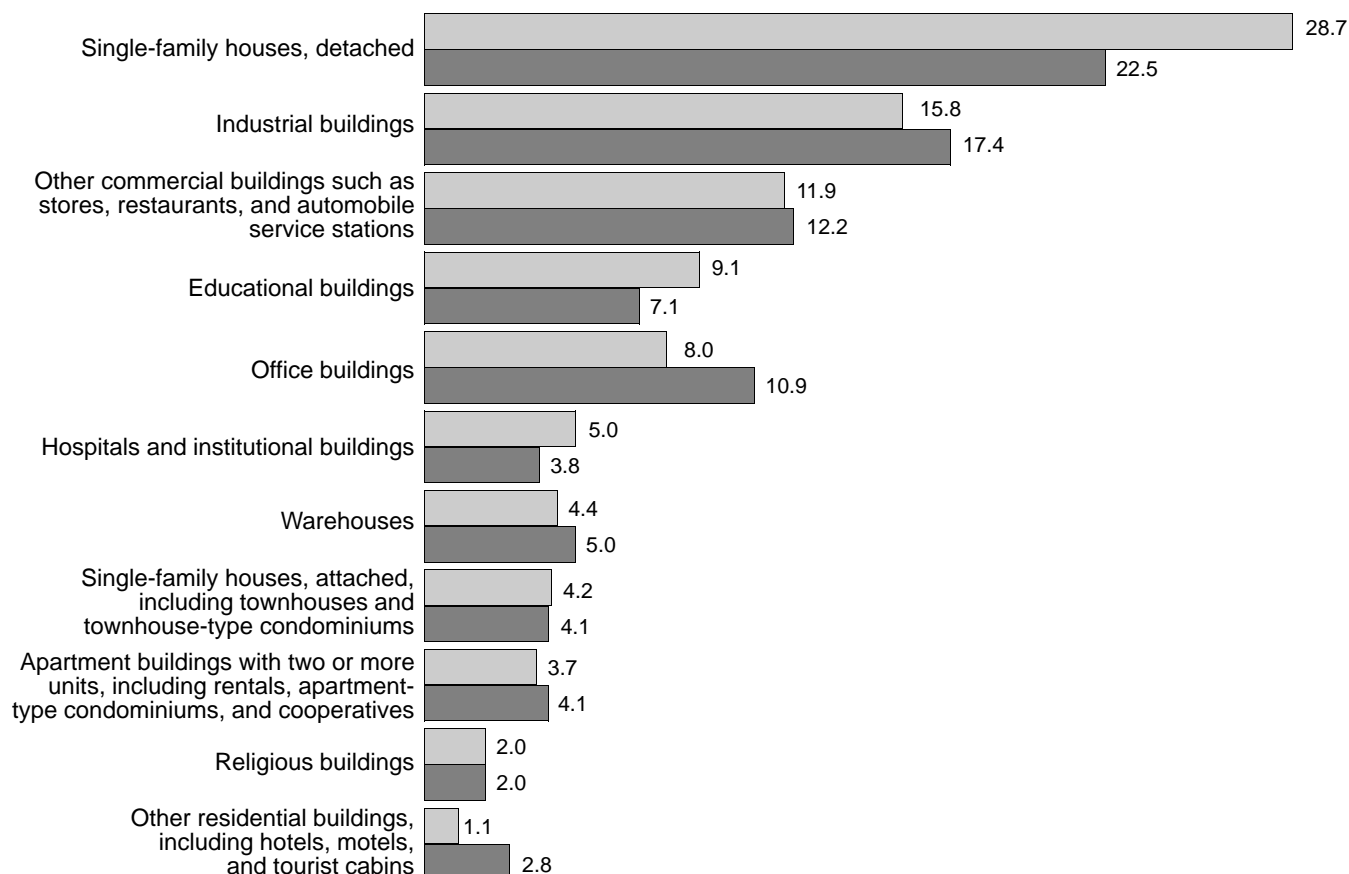


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

1992
1987

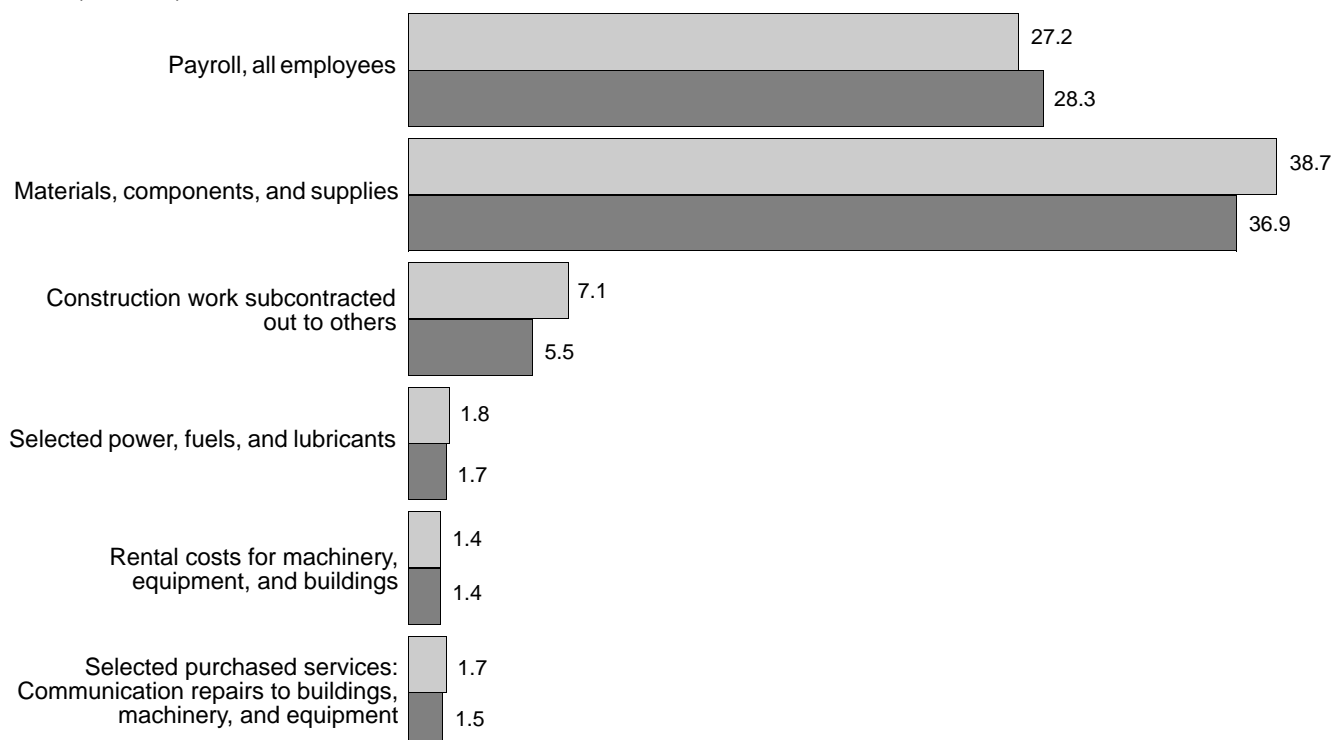


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	27 569	215 545	168 764	4 622 510	3 229 953	16 787 979	15 589 833	8 905 974	6 870 490
Alabama -----	379	3 002	2 375	54 075	36 443	188 620	175 777	96 922	82 207
Alaska -----	55	284	239	10 517	8 372	37 321	35 480	19 068	16 625
Arizona -----	349	4 140	3 325	72 978	52 728	264 798	259 248	137 605	121 966
Arkansas -----	237	1 558	1 182	27 518	17 962	95 089	88 984	48 473	40 832
California -----	2 864	24 875	19 591	547 442	375 541	2 052 794	1 941 158	1 112 002	852 039
Colorado -----	444	3 996	3 232	82 501	61 299	324 468	303 114	154 924	148 346
Connecticut -----	353	2 406	1 872	68 830	46 739	234 288	210 817	126 458	84 399
Delaware -----	99	757	556	18 435	11 540	52 471	50 135	29 138	21 442
District of Columbia -----	8	319	290	(D)	(D)	(D)	(D)	(D)	6 518
Florida -----	2 024	15 802	11 984	286 413	190 011	1 141 258	1 030 533	540 469	494 700
Georgia -----	593	4 977	3 951	99 235	66 105	330 874	307 522	170 873	140 263
Hawaii -----	133	1 259	946	33 392	24 139	129 677	121 008	74 433	47 862
Idaho -----	165	987	811	14 901	11 721	68 548	65 184	28 735	37 918
Illinois -----	1 324	10 928	8 508	309 792	218 188	1 013 654	927 824	563 689	374 091
Indiana -----	641	6 072	4 806	138 419	100 601	463 784	434 589	252 985	184 573
Iowa -----	398	3 368	2 663	69 752	48 193	243 301	232 115	136 970	100 162
Kansas -----	376	3 084	2 444	58 733	42 116	208 000	196 348	119 461	82 090
Kentucky -----	384	3 125	2 474	58 911	41 676	206 234	193 428	113 635	86 352
Louisiana -----	374	2 907	2 198	50 635	32 646	185 932	173 689	103 889	73 250
Maine -----	125	746	604	16 429	11 363	58 014	56 732	30 318	26 626
Maryland -----	617	5 465	4 265	125 523	84 450	354 421	334 671	202 591	135 645
Massachusetts -----	460	3 102	2 355	79 358	56 408	292 806	265 447	154 826	115 724
Michigan -----	872	7 150	5 509	163 009	114 689	581 409	539 923	295 295	246 716
Minnesota -----	447	4 092	3 110	105 725	75 530	392 257	361 972	204 338	171 644
Mississippi -----	239	1 799	1 554	26 333	19 023	107 763	(D)	60 847	45 434
Missouri -----	744	4 923	3 896	102 157	72 981	362 013	338 907	203 710	139 279
Montana -----	103	702	560	12 123	8 466	60 193	55 494	24 069	31 573
Nebraska -----	192	1 448	1 108	25 614	17 400	98 462	89 219	46 750	43 019
Nevada -----	94	1 172	982	28 748	23 104	116 422	107 817	64 161	44 104
New Hampshire -----	114	656	454	13 361	7 975	45 895	43 628	(D)	22 547
New Jersey -----	1 024	5 735	4 542	154 364	113 240	514 484	465 557	283 670	182 022
New Mexico -----	141	1 160	969	17 616	13 465	66 336	64 137	37 631	27 245
New York -----	1 655	10 777	8 232	286 097	198 498	934 882	856 800	531 697	338 919
North Carolina -----	878	5 794	4 642	96 627	67 931	354 002	330 322	189 863	144 893
North Dakota -----	77	748	621	13 545	9 537	53 014	50 076	28 049	22 340
Ohio -----	1 271	9 026	7 051	204 565	148 631	738 428	680 319	396 254	299 560
Oklahoma -----	257	2 008	1 566	39 678	28 121	139 261	132 337	78 925	54 343
Oregon -----	429	2 776	2 158	56 259	38 569	230 457	215 278	120 731	98 075
Pennsylvania -----	1 218	9 721	7 548	214 827	153 052	794 365	746 205	449 499	300 595
Rhode Island -----	113	703	537	14 501	10 268	48 614	46 422	29 436	16 985
South Carolina -----	366	2 736	2 227	41 492	30 341	163 418	155 922	84 838	71 435
South Dakota -----	79	764	596	18 215	11 943	62 139	56 027	27 996	30 905
Tennessee -----	549	4 357	3 383	83 358	57 248	300 934	275 409	147 888	131 090
Texas -----	1 527	12 809	9 840	231 566	149 896	1 138 647	1 005 284	531 741	485 655
Utah -----	191	1 786	1 421	30 857	22 244	117 990	113 487	64 996	50 798
Vermont -----	68	302	243	(D)	(D)	(D)	(D)	(D)	11 649
Virginia -----	766	6 755	5 434	128 846	90 042	412 490	385 392	207 054	179 244
Washington -----	839	5 911	4 631	128 948	93 346	472 215	450 868	255 655	200 533
West Virginia -----	143	1 171	957	25 893	18 723	85 488	83 483	48 433	36 826
Wisconsin -----	718	4 947	3 926	112 051	80 051	380 679	363 588	212 741	157 345
Wyoming -----	53	458	395	6 833	5 213	23 778	22 415	10 426	12 086

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
1 198 147	7 065 888	238 569	232 716	2 296 335	231 137	15 027 806	8 524 431	1	1	3	U.S.
12 843	85 503	2 425	3 365	33 048	2 631	141 776	81 933	7	6	28	AL
1 841	21 673	468	1 129	8 472	215	27 073	14 152	8	9	13	AK
5 549	152 416	3 590	3 730	33 868	4 596	261 650	148 528	4	4	15	AZ
6 104	31 980	1 465	813	15 715	1 604	88 889	49 455	6	6	29	AR
111 636	820 549	33 092	20 927	210 111	27 289	1 907 960	1 109 870	2	2	6	CA
21 353	215 231	2 706	4 857	29 843	3 552	210 124	114 338	5	4	8	CO
23 471	105 131	3 757	3 236	35 108	3 520	276 709	160 446	3	2	6	CT
2 336	24 500	885	494	7 931	800	51 477	32 159	7	6	36	DE
(D)	(D)	(D)	(D)	(D)	526	34 671	32 158	(Z)	(D)	(D)	DC
110 725	449 111	16 307	16 742	130 810	17 824	1 008 422	527 615	3	3	13	FL
23 352	154 032	5 411	3 910	48 890	6 156	361 902	200 241	4	4	14	GA
8 668	56 199	4 152	1 487	11 646	997	78 178	50 739	7	5	20	HI
3 363	31 227	746	*895	*9 575	983	57 472	27 576	13	15	54	ID
85 830	470 841	16 515	16 384	131 896	10 868	828 243	495 388	3	3	13	IL
29 194	177 988	5 486	5 246	63 877	5 072	342 620	194 843	3	3	6	IN
11 186	77 248	3 915	3 704	42 474	2 376	169 334	88 071	6	4	10	IA
11 652	42 850	2 779	3 912	26 892	2 396	141 281	79 963	7	6	19	KS
12 807	107 490	3 020	5 512	34 731	2 684	149 923	82 619	6	4	28	KY
12 244	73 247	2 290	2 629	28 562	3 043	156 060	95 148	4	4	20	LA
1 282	24 702	651	*667	11 843	943	65 868	39 295	12	11	51	ME
19 750	185 366	5 184	3 457	54 715	6 473	381 629	230 766	3	3	15	MD
27 359	138 167	4 671	(D)	47 092	6 262	444 392	252 178	5	5	(D)	MA
41 486	219 476	6 958	11 703	97 085	7 623	608 683	333 035	4	5	17	MI
30 285	203 280	6 332	8 772	66 709	3 456	270 921	143 778	5	4	23	MN
(D)	44 166	1 036	1 392	19 737	1 439	83 340	41 832	11	(D)	22	MS
23 106	159 978	3 643	5 387	58 040	5 390	364 603	214 323	4	4	15	MO
*4 699	31 808	442	*1 898	7 814	356	27 697	14 986	13	18	40	MT
9 243	37 338	1 035	*1 264	11 633	1 419	86 022	46 770	6	6	41	NE
8 605	92 804	1 162	448	10 304	1 145	77 180	45 112	6	7	18	NV
2 267	21 113	1 016	571	9 079	1 145	79 974	44 879	8	8	18	NH
48 927	222 736	6 587	4 167	63 749	9 027	715 806	417 441	3	3	15	NJ
2 199	34 577	1 013	844	12 274	1 518	89 298	53 825	8	7	28	NM
78 082	358 558	14 995	12 349	138 116	14 567	1 049 763	618 481	2	2	12	NY
23 680	134 440	5 331	6 859	55 414	6 266	310 919	169 277	3	4	38	NC
2 938	17 809	627	658	7 443	492	34 766	17 227	7	5	8	ND
58 109	227 191	11 676	9 499	97 914	9 820	676 917	383 140	3	3	10	OH
6 924	56 509	1 264	1 283	21 981	2 179	123 105	67 499	6	6	22	OK
15 179	121 887	4 472	2 849	23 748	2 700	153 110	85 817	6	6	20	OR
48 161	331 366	12 136	7 781	95 506	10 865	726 695	413 808	3	3	10	PA
2 192	24 342	678	500	8 559	947	58 734	32 773	9	8	37	RI
7 495	59 645	3 037	2 235	22 916	2 593	126 373	66 796	6	9	21	SC
6 112	25 205	(D)	(S)	9 029	483	32 451	16 835	10	7	(S)	SD
25 525	126 288	3 212	4 692	50 192	4 239	248 581	126 651	4	5	20	TN
133 363	366 005	10 908	17 306	164 744	13 306	693 455	395 947	3	4	12	TX
4 502	67 575	1 092	1 238	12 393	1 501	100 378	49 933	8	6	25	UT
(D)	(D)	195	293	6 479	638	40 984	23 210	10	(D)	33	VT
27 099	207 523	6 281	5 700	56 194	7 039	377 384	210 561	3	3	20	VA
21 347	218 323	6 268	5 776	65 079	4 480	323 387	179 254	4	3	17	WA
2 005	19 827	922	1 708	14 918	935	55 959	33 798	7	5	27	WV
17 092	149 113	5 285	7 125	65 129	4 317	284 358	158 898	3	3	13	WI
1 363	12 640	275	512	(D)	417	21 284	11 041	17	9	23	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year -----	27 569	25 673	21 152	20 577	1	1	1	2
Proprietors and working partners -----	10 957	7 016	7 791	12 273	2	3	2	3
All employees** -----	215 545	231 137	191 489	171 931	1	1	1	1
Construction workers:								
March -----	151 184	168 096	139 078	125 835	1	1	1	1
May -----	167 348	186 686	156 478	148 478	1	1	1	1
August -----	184 483	202 798	168 728	157 631	1	1	1	1
November -----	172 040	190 106	162 767	152 661	1	1	1	1
Average -----	168 764	186 916	158 901	146 307	1	1	1	1
Other employees:								
March -----	46 551	44 103	32 404	24 637	1	1	1	1
May -----	46 474	43 713	(NA)	(NA)	1	1	(NA)	(NA)
August -----	47 528	44 738	(NA)	(NA)	1	1	(NA)	(NA)
November -----	46 570	44 328	(NA)	(NA)	1	1	(NA)	(NA)
Average -----	46 781	44 221	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees -----	4 622 510	4 313 694	3 034 812	1 967 824	1	(Z)	(Z)	1
Payroll, construction workers -----	3 229 953	3 111 000	2 320 658	1 555 286	1	1	1	1
Payroll, other employees -----	1 392 557	1 202 693	714 154	412 538	1	1	1	1
First-quarter payroll, all employees -----	990 648	921 919	635 491	395 479	1	1	1	(Z)
Fringe benefits, all employees -----	1 285 784	1 084 331	642 394	407 503	1	1	1	(Z)
Legally required expenditures -----	896 435	768 595	436 104	240 107	1	1	1	1
Voluntary expenditures -----	389 349	315 736	206 290	167 396	1	1	1	(Z)
Dollar value of business done -----	16 974 611	15 258 891	10 033 533	6 320 693	1	1	1	1
Value of construction work -----	16 787 979	15 027 806	9 836 510	6 200 390	1	1	1	1
Value of construction work subcontracted in from others -----	7 065 888	5 685 007	4 045 325	2 998 790	1	1	1	1
Other business receipts -----	186 632	231 085	197 023	120 304	4	3	2	2
Net value of construction work† -----	15 589 833	14 182 802	9 315 228	5 938 778	1	1	1	1
Value added†† -----	8 905 974	8 524 431	5 459 875	3 420 412	1	1	1	1
Selected costs -----	8 068 637	6 734 460	4 573 658	2 900 282	1	1	1	1
Materials, components, and supplies -----	6 571 185	5 637 184	3 848 560	2 535 596	1	1	1	1
Construction work subcontracted out to others -----	1 198 147	845 003	521 282	261 612	2	2	1	2
Selected power, fuels, and lubricants -----	299 305	252 272	203 816	103 075	1	1	1	1
Electricity -----	56 072	39 938	27 879	12 350	2	1	2	1
Natural and manufactured gas -----	26 437	12 525	11 310	5 667	2	2	2	3
Gasoline and diesel fuel -----	204 150	184 020	151 864	75 166	1	1	1	1
On highway use -----	192 023	170 647	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use -----	12 127	13 373	(NA)	(NA)	4	3	(NA)	(NA)
Other, including lubricating oils and greases -----	12 646	15 786	12 762	9 893	3	3	2	3
Rental cost for machinery, equipment, and buildings -----	238 569	215 477	109 183	49 191	2	2	1	1
For machinery and equipment -----	96 597	86 984	51 791	23 525	3	2	2	1
For buildings -----	141 971	128 492	57 392	25 666	2	2	2	1
Selected purchased services -----	292 044	230 744	148 914	88 306	2	1	1	1
Communication services -----	119 500	94 106	59 982	35 249	2	2	2	1
Repairs to buildings and other structures -----	21 872	20 105	12 386	6 334	6	3	4	4
Repairs to machinery and equipment -----	150 673	116 532	76 546	46 723	2	1	1	1
Ownership of construction projects:								
Value of construction work -----	16 787 979	15 027 806	9 836 510	6 200 390	1	1	1	1
Government owned -----	3 151 231	2 285 520	1 552 323	803 964	3	2	3	1
Federal -----	878 116	673 356	(NA)	(NA)	5	3	(NA)	(NA)
State and local -----	2 273 116	1 612 163	(NA)	(NA)	3	2	(NA)	(NA)
Privately owned -----	13 636 748	12 742 285	8 284 187	5 396 426	1	1	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	2 143 798	1 616 963	2	1
Capital expenditures, other than land -----	232 716	249 240	3	2
New -----	171 725	188 480	3	2
Used -----	60 991	60 760	7	4
Retirements and disposition of depreciable assets -----	80 179	59 537	6	4
End-of-year gross book value of depreciable assets -----	2 296 335	1 806 667	2	1
Depreciation charges during year -----	239 900	230 558	2	1
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	408 818	382 501	4	3
Capital expenditures, other than land -----	30 486	36 983	9	7
New buildings and other structures -----	19 672	23 497	10	9
Used buildings and other structures -----	10 814	13 485	14	8
Retirements and disposition of depreciable assets -----	9 330	7 309	15	10
End-of-year gross book value of depreciable assets -----	429 974	412 175	4	3
Depreciation charges during year -----	32 941	34 104	5	4
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 734 980	1 234 462	2	1
Capital expenditures, other than land -----	202 230	212 257	3	2
New machinery and equipment, including automobiles and trucks -----	152 053	164 982	3	2
New automobiles and trucks, intended primarily for highway use -----	76 749	103 685	4	3
Used machinery and equipment, including automobiles and trucks -----	50 177	47 274	7	4
Retirements and disposition of depreciable assets -----	70 849	52 227	6	4
End-of-year gross book value of depreciable assets -----	1 866 361	1 394 492	2	1
Depreciation charges during year -----	206 959	196 454	2	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	27 569	1
Value of construction work	16 787 979	1
Establishments with inventories:		
Number	11 022	1
Value of construction work	11 441 215	1
Inventories ¹ :		
End of 1992, materials and supplies	337 331	2
End of 1991, materials and supplies	317 678	2
Establishments with no inventories:		
Number	8 591	2
Value of construction work	3 064 053	2
Establishments not reporting:		
Number	7 957	2
Value of construction work	2 282 711	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	27 569	(S)	5 518	3 311	2 019	446	96	6	2	—	
All employees** -----	215 545	31 354	35 216	43 705	59 650	29 434	13 098	3 088	(D)	—	
Payroll, all employees -----	4 622 510	461 295	623 388	892 709	1 388 225	807 785	367 003	82 105	(D)	—	
Dollar value of business done -----	16 974 611	2 487 154	2 452 520	3 151 388	4 791 109	2 582 645	1 214 919	294 876	(D)	—	
Value of construction work -----	16 787 979	2 473 726	2 435 546	3 103 731	4 736 366	2 543 401	1 204 068	291 141	(D)	—	
Net value of construction work† -----	15 589 833	2 230 668	2 253 124	2 892 909	4 432 210	2 378 319	1 127 601	<u>275 002</u>	(D)	—	
Value added†† -----	8 905 974	1 172 001	1 247 090	1 656 825	2 558 575	1 436 471	655 414	<u>179 598</u>	(D)	—	
Cost of materials, components, supplies, and fuels -----	6 870 490	1 072 095	1 023 009	1 283 740	1 928 378	981 092	483 038	<u>99 139</u>	(D)	—	
Cost of construction work subcontracted out to others -----	1 198 147	243 059	182 422	210 823	304 155	165 082	76 467	<u>16 139</u>	(D)	—	
Rental cost for machinery, equipment, and buildings -----	238 569	31 462	32 817	50 476	70 012	32 282	16 309	<u>5 211</u>	(D)	—	
Capital expenditures, other than land -----	232 716	37 591	39 685	47 638	64 066	29 816	11 091	<u>2 829</u>	(D)	—	
End-of-year gross book value of depreciable assets -----	2 296 335	332 289	356 780	442 253	690 292	315 677	131 223	<u>27 820</u>	(D)	—	
1987											
All employees** -----	231 137	(S)	38 854	48 731	64 632	31 422	17 038	<u>3 076</u>	(D)	—	
Value of construction work -----	15 027 806	(S)	2 025 854	2 958 609	4 435 043	2 323 211	<u>1 513 311</u>	(D)	(D)	—	
Value added†† -----	8 524 431	(S)	1 168 457	1 671 320	2 538 488	1 345 678	<u>791 068</u>	<u>133 285</u>	(D)	—	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	2	3	3	2	1	(Z)	(Z)	(D)	—	
Net value of construction work† -----	1	3	3	3	1	1	(Z)	(Z)	(D)	—	
Capital expenditures, other than land -----	3	8	10	8	4	2	(Z)	(Z)	(D)	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	27 569	(S)	(S)	(S)	7 436	4 935	3 451	2 559	913	360	114
All employees** -----	215 545	(S)	(S)	(S)	22 697	28 333	34 278	49 029	33 145	22 502	14 979
Payroll, all employees -----	4 622 510	(S)	(S)	(S)	290 149	467 249	651 239	1 098 256	853 496	675 578	489 065
Dollar value of business done -----	16 974 611	(S)	(S)	(S)	1 199 878	1 769 021	2 374 491	3 897 990	3 133 714	2 348 354	1 853 968
Value of construction work -----	16 787 979	(S)	(S)	(S)	1 194 280	1 757 466	2 350 584	3 848 852	3 094 150	2 321 658	1 825 849
Net value of construction work† -----	15 589 833	(S)	(S)	(S)	1 138 378	1 645 986	2 199 145	3 560 712	2 866 576	2 124 983	1 674 591
Value added†† -----	8 905 974	(S)	(S)	(S)	637 922	929 514	1 254 480	1 982 313	1 614 498	1 277 666	991 260
Cost of materials, components, supplies, and fuels -----	6 870 490	(S)	(S)	(S)	506 054	728 027	968 572	1 627 538	1 291 642	874 012	711 450
Cost of construction work subcontracted out to others -----	1 198 147	(S)	(S)	(S)	55 902	111 480	151 439	288 140	227 574	196 675	151 258
Rental cost for machinery, equipment, and buildings -----	238 569	(S)	(S)	(S)	15 023	23 781	36 288	58 311	45 116	28 835	25 195
Capital expenditures, other than land -----	232 716	(S)	(S)	(S)	23 527	30 496	30 559	58 617	38 671	27 507	17 070
End-of-year gross book value of depreciable assets -----	2 296 335	(S)	(S)	(S)	190 348	262 500	346 149	576 724	376 325	273 867	205 299
1987											
All employees** -----	231 137	(S)	(S)	(S)	(S)	30 330	34 941	54 850	37 169	18 438	14 830
Value of construction work -----	15 027 806	(S)	(S)	(S)	(S)	1 526 858	2 085 876	3 743 300	2 932 980	1 666 389	1 435 145
Value added†† -----	8 524 431	(S)	(S)	(S)	(S)	851 023	1 160 978	2 117 470	1 692 946	940 121	852 563
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	(S)	3	3	3	2	1	1	(Z)
Net value of construction work† -----	1	(S)	(S)	(S)	3	3	3	2	2	1	(Z)
Capital expenditures, other than land -----	3	(S)	(S)	(S)	10	10	9	6	7	5	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

18—8 ROOFING, SIDING, AND SHEET METAL WORK

CONSTRUCTION—INDUSTRY SERIES

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	16 787 979	5 623 898	6 469 201	4 104 966	1	1	1	2
Building construction	16 051 453	5 562 622	6 420 992	4 067 839	1	1	1	2
Single-family houses	5 525 826	1 814 490	2 260 849	1 450 488	2	3	2	3
Single-family houses, detached	4 815 863	1 553 402	2 020 190	1 242 271	2	3	2	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	709 962	261 088	240 658	208 216	3	6	5	5
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	616 145	136 269	242 776	237 100	3	6	4	3
Other residential buildings, including hotels, motels, and tourist cabins	179 337	64 312	65 285	49 740	3	3	5	7
Office buildings	1 335 019	551 955	486 772	296 291	1	2	2	3
Other commercial buildings such as stores, restaurants, and automobile service stations	1 993 129	778 841	723 268	491 020	2	2	2	3
Industrial buildings and warehouses	3 392 784	1 110 760	1 386 207	895 816	1	1	1	2
Industrial buildings	2 654 523	865 812	1 094 477	694 234	1	2	1	2
Warehouses	738 261	244 948	291 730	201 582	2	2	3	4
Religious buildings	332 981	88 592	144 518	99 870	2	4	3	3
Educational buildings	1 528 562	527 525	671 941	329 097	2	3	3	4
Hospitals and institutional buildings	844 384	338 146	347 701	158 537	2	1	3	4
Amusement, social, and recreational buildings, indoors	113 522	56 979	32 416	24 127	4	3	3	16
Other nonresidential buildings	189 766	94 753	59 260	35 753	10	8	28	16
Nonbuilding construction	146 612	61 277	48 209	37 127	4	3	7	6
Construction work, n.s.k.	589 914	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1987								
Value of construction work	15 027 806	5 870 711	4 796 373	3 629 887	1	1	1	1
Building construction	14 079 526	5 768 140	4 745 480	3 565 906	1	1	1	1
Single-family houses	4 000 304	1 504 500	1 383 447	1 112 357	2	2	2	3
Single-family houses, detached	3 385 622	1 207 919	1 243 633	934 069	2	3	3	3
Single-family houses, attached, including townhouses and townhouse-type condominiums	614 682	296 581	139 814	178 287	3	4	6	6
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	616 429	236 558	182 354	197 516	2	5	3	3
Other residential buildings, including hotels, motels, and tourist cabins	427 892	201 902	121 717	104 272	3	3	5	5
Office buildings	1 644 814	908 281	457 550	278 982	1	2	2	2
Other commercial buildings such as stores, restaurants, and automobile service stations	1 829 764	792 750	580 525	456 489	1	2	2	3
Industrial buildings and warehouses	3 370 775	1 392 993	1 115 051	862 730	1	1	1	2
Industrial buildings	2 616 099	1 057 834	881 172	677 093	1	1	2	2
Warehouses	754 676	335 159	233 879	185 637	2	3	2	3
Religious buildings	293 639	83 610	117 819	92 209	2	3	4	3
Educational buildings	1 070 234	330 933	472 306	266 994	2	2	2	3
Hospitals and institutional buildings	570 190	215 894	231 394	122 901	1	2	2	4
Amusement, social, and recreational buildings, indoors	77 910	29 903	29 216	18 790	4	5	6	12
Other nonresidential buildings	177 575	70 816	54 101	52 666	7	13	4	8
Nonbuilding construction	217 446	102 571	50 893	63 981	5	5	6	13
Construction work, n.s.k.	730 834	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments -----	27 569	215 545	4 622 510	16 787 979	8 264 658	15 589 833	8 905 974	1 198 147	1	1	2
Establishments not specializing by type -----	6 053	84 155	2 026 689	6 982 110	(NA)	6 523 474	3 775 956	458 636	1	1	4
Establishments specializing 51 percent or more -----	21 516	131 390	2 595 821	9 805 870	8 264 658	9 066 359	5 130 018	739 511	1	1	3
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	12 425	63 784	1 082 892	4 632 120	4 038 638	4 245 633	2 297 003	386 486	2	2	5
Establishments with —											
100 percent specialization -----	5 087	19 909	335 087	1 527 003	1 527 003	1 367 884	788 937	159 119	3	3	7
90 to 99 percent specialization -----	2 923	17 037	280 422	1 205 631	1 127 645	1 120 122	587 822	85 509	4	4	10
80 to 89 percent specialization -----	1 797	9 433	162 484	735 479	604 672	663 780	345 012	71 700	6	6	16
70 to 79 percent specialization -----	1 491	8 798	144 897	586 154	427 214	549 838	283 384	36 316	5	6	13
60 to 69 percent specialization -----	834	6 891	125 604	454 549	283 926	433 928	232 349	20 621	6	6	12
51 to 59 percent specialization -----	293	1 715	34 398	123 304	68 178	110 082	59 499	13 222	11	10	25
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	1 050	4 483	75 262	303 449	263 462	274 116	140 119	29 332	7	8	20
Establishments with —											
100 percent specialization -----	505	1 821	29 116	128 604	128 604	113 670	57 219	14 935	10	12	24
90 to 99 percent specialization -----	145	683	13 302	52 516	49 225	47 876	22 160	4 641	17	16	31
80 to 89 percent specialization -----	170	643	10 537	47 357	38 837	41 815	21 495	*5 542	20	26	72
70 to 79 percent specialization -----	77	293	4 509	17 412	12 541	17 101	8 577	*311	31	32	44
60 to 69 percent specialization -----	(S)	(S)	11 397	39 500	24 396	36 196	20 296	*3 304	(S)	23	59
51 to 59 percent specialization -----	(S)	368	6 401	18 059	9 858	17 458	10 373	(S)	21	23	(S)
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type -----	404	2 146	36 969	142 726	109 045	127 077	73 733	15 649	10	10	12
Establishments with —											
100 percent specialization -----	101	476	6 553	21 576	21 576	18 947	10 379	2 629	25	23	27
90 to 99 percent specialization -----	(S)	240	6 316	24 997	23 332	20 070	14 085	4 927	28	24	21
80 to 89 percent specialization -----	29	306	5 599	19 681	16 272	17 658	8 966	2 023	24	13	13
70 to 79 percent specialization -----	61	320	4 861	23 667	16 666	21 110	11 107	*2 557	28	30	43
60 to 69 percent specialization -----	(S)	617	10 191	41 410	25 107	38 799	22 960	2 611	17	18	27
51 to 59 percent specialization -----	*18	*187	3 450	11 395	6 092	10 493	6 236	*902	44	30	48
OFFICE BUILDINGS											
All establishments specializing in type -----	316	4 941	157 330	436 325	325 584	400 960	262 260	35 365	4	3	8
Establishments with —											
100 percent specialization -----	82	997	33 090	78 080	78 080	70 927	51 462	7 153	7	9	30
90 to 99 percent specialization -----	38	431	8 825	24 224	22 203	22 048	12 693	2 176	23	18	9
80 to 89 percent specialization -----	(S)	675	25 716	79 632	65 241	69 368	47 150	10 265	4	7	16
70 to 79 percent specialization -----	48	718	21 161	61 798	45 290	57 417	33 583	4 382	11	12	13
60 to 69 percent specialization -----	63	1 466	49 148	136 539	83 776	127 830	83 775	8 709	7	5	4
51 to 59 percent specialization -----	48	654	19 390	56 051	30 995	53 371	33 596	2 680	13	9	16
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	1 456	13 600	280 111	1 081 378	903 329	1 024 910	557 372	56 468	4	3	9
Establishments with —											
100 percent specialization -----	665	5 541	111 961	436 147	436 147	417 553	222 631	18 594	6	5	9
90 to 99 percent specialization -----	182	1 579	32 481	118 714	109 497	112 562	59 510	6 152	11	9	5
80 to 89 percent specialization -----	119	1 490	26 876	101 232	83 012	94 877	49 890	6 355	11	9	21
70 to 79 percent specialization -----	160	1 901	42 469	152 762	110 414	146 561	85 032	6 201	9	10	15
60 to 69 percent specialization -----	253	2 185	48 662	195 667	122 061	181 766	102 904	13 901	9	10	30
51 to 59 percent specialization -----	78	904	17 663	76 856	42 198	71 591	37 406	5 265	17	16	18
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	1 213	18 865	507 023	1 542 148	1 238 202	1 432 595	892 859	109 553	2	2	3
Establishments with —											
100 percent specialization -----	521	5 473	138 260	428 692	428 692	397 206	252 340	31 486	5	4	9
90 to 99 percent specialization -----	164	2 653	72 771	203 408	190 306	192 877	121 628	10 531	7	5	6
80 to 89 percent specialization -----	103	2 180	61 976	181 505	149 214	167 040	99 687	14 465	6	4	6
70 to 79 percent specialization -----	172	3 679	100 494	315 791	227 304	289 403	180 841	26 388	4	4	4
60 to 69 percent specialization -----	146	3 117	85 274	249 411	154 586	231 833	146 885	17 577	5	4	4
51 to 59 percent specialization -----	107	1 764	48 248	163 341	88 099	154 235	91 479	9 105	7	6	13
WAREHOUSES											
All establishments specializing in type -----	85	1 084	23 373	89 247	65 264	84 726	40 532	4 521	9	7	7
Establishments with —											
100 percent specialization -----	(S)	132	2 388	11 416	11 416	11 077	(S)	(S)	36	31	(S)
90 to 99 percent specialization -----	(S)	(S)	*1 405	*5 983	*5 477	*5 600	(S)	*384	(S)	62	58
80 to 89 percent specialization -----	*11	103	4 271	16 359	13 196	16 079	6 752	*281	24	12	57
70 to 79 percent specialization -----	6	167	5 127	15 593	11 754	(D)	6 205	(D)	11	9	(D)
60 to 69 percent specialization -----	9	439	7 466	29 010	17 476	(D)	12 220	(D)	3	3	(D)
51 to 59 percent specialization -----	*8	*153	2 715	10 885	5 944	10 592	5 024	293	41	32	28

18-10 ROOFING, SIDING, AND SHEET METAL WORK

CONSTRUCTION—INDUSTRY SERIES

Table 8. **Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992—Con.**

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
EDUCATIONAL BUILDINGS											
All establishments specializing in type -----	575	6 597	155 319	582 082	406 980	537 418	289 182	44 664	5	5	14
Establishments with —											
100 percent specialization -----	57	268	5 726	28 016	28 016	25 030	13 716	*2 986	31	32	50
90 to 99 percent specialization -----	92	615	16 179	43 388	39 770	41 292	22 255	2 096	15	16	22
80 to 89 percent specialization -----	83	892	17 078	80 297	66 278	72 742	37 329	7 555	18	14	32
70 to 79 percent specialization -----	98	1 313	34 247	124 694	90 628	111 500	65 534	13 195	12	12	35
60 to 69 percent specialization -----	177	2 183	49 518	193 348	120 378	179 565	98 207	13 784	10	11	20
51 to 59 percent specialization -----	68	1 326	32 570	112 339	61 912	107 290	52 140	5 049	8	6	4
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type -----	153	2 041	63 625	180 998	130 402	166 594	114 486	14 404	4	5	9
Establishments with —											
100 percent specialization -----	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(D)	(S)	(S)	(D)
90 to 99 percent specialization -----	* 11	141	5 746	16 820	15 555	15 520	10 171	(S)	5	27	(S)
80 to 89 percent specialization -----	(S)	391	10 775	32 123	25 844	30 456	18 566	1 667	4	3	(Z)
70 to 79 percent specialization -----	(S)	374	12 170	36 966	26 393	28 577	20 557	8 388	3	3	(Z)
60 to 69 percent specialization -----	43	774	24 077	59 729	36 927	58 750	45 010	978	10	9	19
51 to 59 percent specialization -----	10	247	8 164	21 197	11 519	(D)	9 758	(D)	10	6	(D)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	27 569	168 764	151 184	167 348	184 483	172 040	1	1	1	1	1	1
Alabama	379	2 375	2 234	2 299	2 504	2 464	6	7	6	7	7	10
Alaska	55	239	218	248	296	193	5	9	10	10	7	11
Arizona	349	3 325	3 111	3 415	3 419	3 356	6	5	5	5	5	5
Arkansas	237	1 182	1 179	1 202	1 169	1 180	9	6	7	7	6	6
California	2 864	19 591	18 833	19 164	20 596	19 771	2	2	2	2	2	2
Colorado	444	3 232	2 932	3 152	3 375	3 468	5	5	4	4	6	6
Connecticut	353	1 872	1 467	1 912	2 219	1 892	6	3	4	3	2	3
Delaware	99	556	510	577	564	571	16	8	8	7	8	8
District of Columbia	8	290	(D)	294	(D)	278	(Z)	(Z)	(Z)	(Z)	(D)	(Z)
Florida	2 024	11 984	11 321	11 611	12 328	12 676	3	3	3	3	3	3
Georgia	593	3 951	3 860	3 773	4 108	4 064	5	4	4	4	4	4
Hawaii	133	946	981	861	916	1 027	7	7	10	8	8	9
Idaho	165	811	653	835	948	805	12	14	15	15	15	13
Illinois	1 324	8 508	6 809	9 031	9 627	8 563	4	3	3	3	3	3
Indiana	641	4 806	4 241	4 877	5 346	4 762	5	3	4	3	3	3
Iowa	398	2 663	2 233	2 639	3 106	2 673	7	6	6	6	6	7
Kansas	376	2 444	1 870	2 286	3 090	2 549	6	8	7	8	10	9
Kentucky	384	2 474	2 334	2 462	2 569	2 531	5	6	6	6	7	6
Louisiana	374	2 198	2 266	2 214	2 178	2 135	5	5	6	5	5	5
Maine	125	604	471	582	694	671	15	13	10	13	13	14
Maryland	617	4 265	3 942	4 401	4 607	4 112	6	3	4	3	3	3
Massachusetts	460	2 355	1 935	2 292	2 725	2 468	6	5	6	5	5	5
Michigan	872	5 509	4 320	5 412	6 637	5 668	4	4	5	4	4	4
Minnesota	447	3 110	2 577	3 155	3 404	3 305	6	5	5	5	5	6
Mississippi	239	1 554	1 554	1 489	1 631	1 541	8	11	12	9	11	13
Missouri	744	3 896	3 350	3 891	4 454	3 890	4	4	4	4	4	4
Montana	103	560	454	545	642	598	13	12	13	13	12	12
Nebraska	192	1 108	974	1 153	1 237	1 067	10	7	7	6	7	7
Nevada	94	982	932	963	1 033	1 002	6	7	7	6	7	7
New Hampshire	114	454	347	430	525	512	12	9	8	8	10	10
New Jersey	1 024	4 542	3 881	4 600	5 104	4 581	4	3	3	4	4	3
New Mexico	141	969	869	932	1 126	949	4	8	9	9	10	9
New York	1 655	8 232	6 390	8 156	9 599	8 782	3	3	3	3	3	3
North Carolina	878	4 642	4 517	4 602	4 767	4 680	4	4	4	4	4	4
North Dakota	77	621	558	610	713	605	19	8	8	8	8	8
Ohio	1 271	7 051	5 658	6 879	8 263	7 405	3	3	4	3	3	3
Oklahoma	257	1 566	1 516	1 529	1 659	1 562	6	6	7	6	6	7
Oregon	429	2 158	2 063	1 958	2 439	2 173	6	6	6	7	6	6
Pennsylvania	1 218	7 548	6 389	7 635	8 235	7 932	3	3	3	3	3	3
Rhode Island	113	537	472	580	552	545	9	10	11	10	10	12
South Carolina	366	2 227	2 110	2 212	2 333	2 254	6	6	6	6	6	7
South Dakota	79	596	497	650	664	572	15	9	10	10	9	11
Tennessee	549	3 383	3 277	3 316	3 570	3 367	5	4	4	4	5	4
Texas	1 527	9 840	9 871	9 724	10 358	9 408	3	4	4	4	4	4
Utah	191	1 421	1 212	1 401	1 574	1 497	8	9	9	9	9	11
Vermont	68	243	(D)	244	(D)	240	16	12	(D)	14	(D)	12
Virginia	766	5 434	5 080	5 302	5 781	5 573	4	4	4	4	4	4
Washington	839	4 631	4 332	4 631	5 110	4 449	3	3	4	4	4	3
West Virginia	143	957	785	857	1 115	1 071	6	7	7	7	7	8
Wisconsin	718	3 926	3 012	4 026	4 474	4 190	4	3	4	3	3	3
Wyoming	53	395	323	357	485	415	10	19	17	18	22	16

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	16 787 979	27 473	15 564 131	5 061	1 223 848	15 027 806	11.7	1	1	2
Alabama -----	176 600	378	162 554	107	14 046	140 086	26.1	5	6	7
Alaska -----	39 526	(S)	37 321	10	2 205	28 075	40.8	8	9	5
Arizona -----	244 386	349	240 048	29	4 338	256 718	-4.8	4	5	6
Arkansas -----	105 372	234	84 487	76	20 884	83 900	25.6	7	7	21
California -----	2 064 661	2 856	2 033 568	58	31 092	1 908 539	8.2	2	2	3
Colorado -----	341 373	444	310 734	35	30 639	212 809	60.4	4	5	1
Connecticut -----	227 206	353	207 428	84	19 778	266 842	-14.9	3	3	5
Delaware -----	58 541	99	44 087	64	14 454	77 175	-24.1	7	8	16
District of Columbia -----	47 184	8	11 984	127	35 200	76 274	-38.1	4	(Z)	5
Florida -----	1 192 150	2 024	1 109 943	173	82 206	1 025 914	16.2	3	3	8
Georgia -----	348 233	593	305 530	189	42 703	356 850	-2.4	3	3	7
Hawaii -----	143 407	133	129 677	25	13 730	83 821	71.1	5	5	13
Idaho -----	69 252	161	59 512	57	9 740	51 739	33.8	12	14	16
Illinois -----	1 041 817	1 322	979 816	205	62 002	874 539	19.1	3	3	5
Indiana -----	433 770	641	393 876	186	39 894	308 141	40.8	3	3	3
Iowa -----	223 009	398	210 331	81	12 678	144 861	53.9	4	4	11
Kansas -----	219 543	368	183 268	136	36 275	163 496	34.3	6	7	5
Kentucky -----	221 913	384	182 276	179	39 636	183 567	20.9	4	5	6
Louisiana -----	190 988	374	180 320	61	10 668	161 486	18.3	4	4	5
Maine -----	56 946	125	53 646	50	3 300	64 406	-11.6	11	11	21
Maryland -----	330 485	617	280 223	212	50 263	365 453	-9.6	4	4	5
Massachusetts -----	296 197	460	268 469	102	27 728	460 931	-35.7	5	5	5
Michigan -----	587 045	863	558 809	136	28 236	568 358	3.3	7	7	12
Minnesota -----	390 094	447	372 088	91	18 006	269 609	44.7	4	4	8
Mississippi -----	103 451	239	90 454	97	12 997	86 413	19.7	11	13	3
Missouri -----	316 667	738	289 886	107	26 781	339 322	-6.7	5	5	9
Montana -----	57 754	103	56 595	12	1 159	26 770	115.7	18	18	33
Nebraska -----	91 357	192	88 212	37	3 145	77 953	17.2	8	9	18
Nevada -----	143 064	94	113 089	59	29 975	77 950	83.5	5	7	3
New Hampshire -----	45 263	106	36 065	64	9 197	80 759	-44.0	7	8	13
New Jersey -----	483 393	1 023	449 267	176	34 127	712 434	-32.1	4	4	10
New Mexico -----	76 654	141	65 486	45	*11 169	93 825	-18.3	9	7	41
New York -----	911 821	1 654	867 206	186	44 615	1 039 527	-12.3	2	3	4
North Carolina -----	363 615	878	324 922	169	38 693	324 812	11.9	4	4	8
North Dakota -----	49 175	77	45 498	*19	3 677	33 377	47.3	7	7	34
Ohio -----	726 863	1 270	689 757	183	37 106	654 988	11.0	3	3	7
Oklahoma -----	141 128	249	129 213	74	11 915	123 506	14.3	6	6	30
Oregon -----	226 217	429	212 723	80	13 494	155 859	45.1	6	6	18
Pennsylvania -----	765 915	1 205	712 473	172	53 441	679 057	12.8	3	3	8
Rhode Island -----	54 293	113	47 039	52	7 253	59 967	-9.5	8	9	11
South Carolina -----	185 683	(S)	147 459	147	38 224	142 220	30.6	8	9	10
South Dakota -----	50 692	79	46 313	27	4 379	28 425	78.3	9	10	14
Tennessee -----	282 792	545	258 377	111	24 415	263 997	7.1	5	5	3
Texas -----	1 095 873	1 517	1 082 406	70	13 467	685 075	60.0	5	5	10
Utah -----	102 584	191	101 637	8	948	100 368	2.2	8	8	7
Vermont -----	20 255	(S)	19 282	11	973	35 039	-42.2	7	7	28
Virginia -----	474 365	766	389 403	238	84 962	400 818	18.3	3	3	7
Washington -----	477 005	838	454 935	90	22 070	320 484	48.8	3	3	12
West Virginia -----	87 318	143	65 827	142	21 491	55 042	58.6	5	6	12
Wisconsin -----	374 978	718	357 125	168	17 854	269 231	39.3	3	3	10
Wyoming -----	30 106	53	23 486	44	6 620	26 973	11.6	10	8	36

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business -----	16 974 611	15 258 891	1	1
SPECIAL TRADE CONTRACTORS				
Architectural sheet metal contractor, including gutters and downspouts ..	1 053 906	952 400	3	2
Carpentry contractor.....	130 352	90 179	7	7
Heating, ventilation and air-conditioning contractor.....	131 296	142 408	7	10
Roofing contractor	9 734 747	8 711 104	1	1
Sheet metal contractor	3 241 169	3 064 143	1	1
Siding contractor	1 530 428	1 130 220	3	4
Specialty sheet metal contractor, including decking and metal ceilings..	432 284	300 091	4	6
Other construction activities	421 828	422 225	3	(NA)
Other business activities	182 166	233 518	4	(NA)
Kind of business activity, n.s.k.	116 434	212 603	5	6

Table 12. **Selected Industry Ratios for Establishments With Payroll: 1992 and 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	7.8	9.0	1
Number of construction workers	6.1	7.3	1
Number of all other employees	1.7	1.7	1
Payroll, all employees \$1,000 ..	167.7	168.0	1
Payroll, construction workers do ..	117.2	121.2	1
Payroll, other employees do ..	50.5	46.8	1
Dollar value of business done do ..	615.7	594.4	1
Value of construction work do ..	608.9	585.4	1
Cost of materials, components, supplies, and fuels do ..	249.2	229.4	1
Construction work subcontracted to others do ..	43.5	32.9	2
Rental cost for machinery, equipment, and buildings do ..	8.7	8.4	2
Capital expenditures, other than land do ..	8.4	9.7	3
Gross book value of depreciable assets do ..	83.3	70.4	2
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	21.4	18.7	(Z)
Dollar value of business done do ..	78.8	66.0	1
Value added†† do ..	41.3	36.9	(Z)
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	19.1	16.6	(Z)
Value of construction work do ..	99.5	80.4	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	29.8	27.2	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.275	.287	(Z)
Cost of materials, components, supplies, and fuels do ..	.409	.392	(Z)
Cost of construction work subcontracted out to others do ..	.071	.056	2
Value of construction work subcontracted in from others do ..	.421	.378	2
Rental cost for machinery, equipment, and buildings do ..	.014	.014	2

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	7.8	21.4	99.5	.275	.409	.071	.421	.014
Alabama -----	7.9	18.0	79.4	.287	.436	.068	.453	.013
Alaska -----	5.1	37.0	156.2	.282	.445	.049	.581	.013
Arizona -----	11.8	17.6	79.6	.276	.461	.021	.576	.014
Arkansas -----	6.6	17.7	80.4	.289	.429	.064	.336	.015
California -----	8.7	22.0	104.8	.267	.415	.054	.400	.016
Colorado -----	9.0	20.6	100.4	.254	.457	.066	.663	.008
Connecticut -----	6.8	28.6	125.2	.294	.360	.100	.449	.016
Delaware -----	7.6	24.4	94.4	.351	.409	.045	.467	.017
District of Columbia -----	39.9	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	7.8	18.1	95.2	.251	.433	.097	.394	.014
Georgia -----	8.4	19.9	83.7	.300	.424	.071	.466	.016
Hawaii -----	9.4	26.5	137.1	.257	.369	.067	.433	.032
Idaho -----	6.0	15.1	84.5	.217	.553	.049	.456	.011
Illinois -----	8.3	28.3	119.1	.306	.369	.085	.464	.016
Indiana -----	9.5	22.8	96.5	.298	.398	.063	.384	.012
Iowa -----	8.5	20.7	91.4	.287	.412	.046	.317	.016
Kansas -----	8.2	19.0	85.1	.282	.395	.056	.206	.013
Kentucky -----	8.1	18.9	83.4	.286	.419	.062	.521	.015
Louisiana -----	7.8	17.4	84.6	.272	.394	.066	.394	.012
Maine -----	6.0	22.0	96.0	.283	.459	.022	.426	.011
Maryland -----	8.9	23.0	83.1	.354	.383	.056	.523	.015
Massachusetts -----	6.7	25.6	124.3	.271	.395	.093	.472	.016
Michigan -----	8.2	22.8	105.5	.280	.424	.071	.377	.012
Minnesota -----	9.2	25.8	126.1	.270	.438	.077	.518	.016
Mississippi -----	7.5	14.6	69.3	.244	.422	(D)	.410	.010
Missouri -----	6.6	20.8	92.9	.282	.385	.064	.442	.010
Montana -----	6.8	17.3	107.5	.201	.525	*.078	.528	.007
Nebraska -----	7.5	17.7	88.9	.260	.437	.094	.379	.011
Nevada -----	12.5	24.5	118.6	.247	.379	.074	.797	.010
New Hampshire -----	5.8	20.4	101.1	.291	.491	.049	.460	.022
New Jersey -----	5.6	26.9	113.3	.300	.354	.095	.433	.013
New Mexico -----	8.2	15.2	68.5	.266	.411	.033	.521	.015
New York -----	6.5	26.5	113.6	.306	.363	.084	.384	.016
North Carolina -----	6.6	16.7	76.3	.273	.409	.067	.380	.015
North Dakota -----	9.7	18.1	85.4	.256	.421	.055	.336	*.012
Ohio -----	7.1	22.7	104.7	.277	.406	.079	.308	.016
Oklahoma -----	7.8	19.8	88.9	.285	.390	.050	.406	.009
Oregon -----	6.5	20.3	106.8	.244	.426	.066	.529	.019
Pennsylvania -----	8.0	22.1	105.2	.270	.378	.061	.417	.015
Rhode Island -----	6.2	20.6	90.5	.298	.349	.045	.501	.014
South Carolina -----	7.5	15.2	73.4	.254	.437	.046	.365	.019
South Dakota -----	9.7	23.8	104.3	.293	.497	.098	.406	(D)
Tennessee -----	7.9	19.1	89.0	.277	.436	.085	.420	.011
Texas -----	8.4	18.1	115.7	.203	.427	.117	.321	.010
Utah -----	9.4	17.3	83.0	.262	.431	.038	.573	.009
Vermont -----	4.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia -----	8.8	19.1	75.9	.312	.435	.066	.503	.015
Washington -----	7.0	21.8	102.0	.273	.425	.045	.462	.013
West Virginia -----	8.2	22.1	89.3	.303	.431	.023	.232	.011
Wisconsin -----	6.9	22.7	97.0	.294	.413	.045	.392	.014
Wyoming -----	8.7	14.9	60.2	.287	.508	.057	.532	.012

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

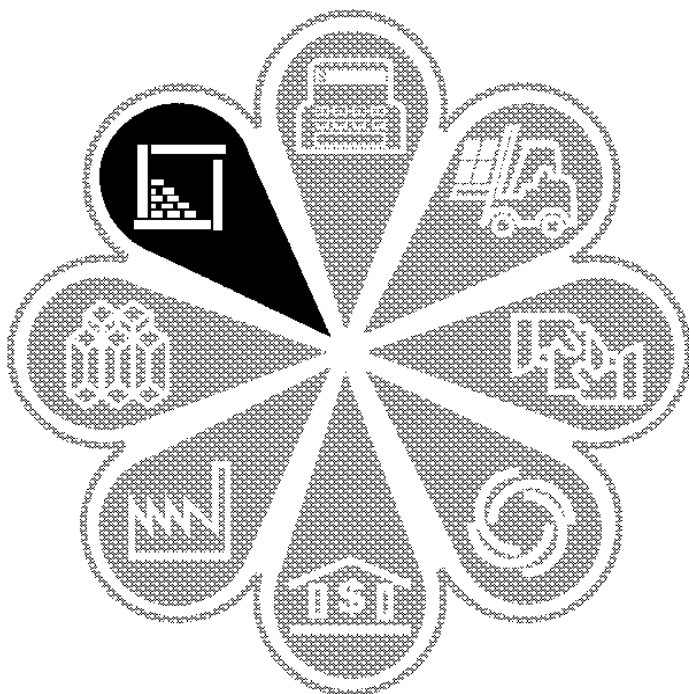
Census of Construction Industries

CC92-I-19

INDUSTRY SERIES

Concrete Work Special Trade Contractors

Industry 1771



1992

Census of

Construction Industries

CC92-I-19

INDUSTRY SERIES

Concrete Work

Special Trade Contractors

Industry 1771

Issued April 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{p_i}$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

Summary of Findings

Establishments classified in this industry are primarily engaged in concrete work including portland cement and asphalt, surfacing of concrete floors, constructing culverts and curbs, pouring concrete foundations, construction with gunite and stucco, and constructing private driveways and walks of all materials. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$14.6 billion in total dollar value of business. Of this amount, \$14.4 billion were for the value of construction work. These establishments paid out \$5.3 billion for materials, components, and supplies and \$1.2 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$367 million. Value added for 1992 was \$7.7 billion.

There were 26,123 establishments with total employment averaging 192,539 during the year. Total payroll for 1992 was \$4.0 billion.

Larger establishments with 20 employees or more, while representing only 7.1 percent of the total number of employer establishments in this industry, accounted for 46.8 percent of all business done.

A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

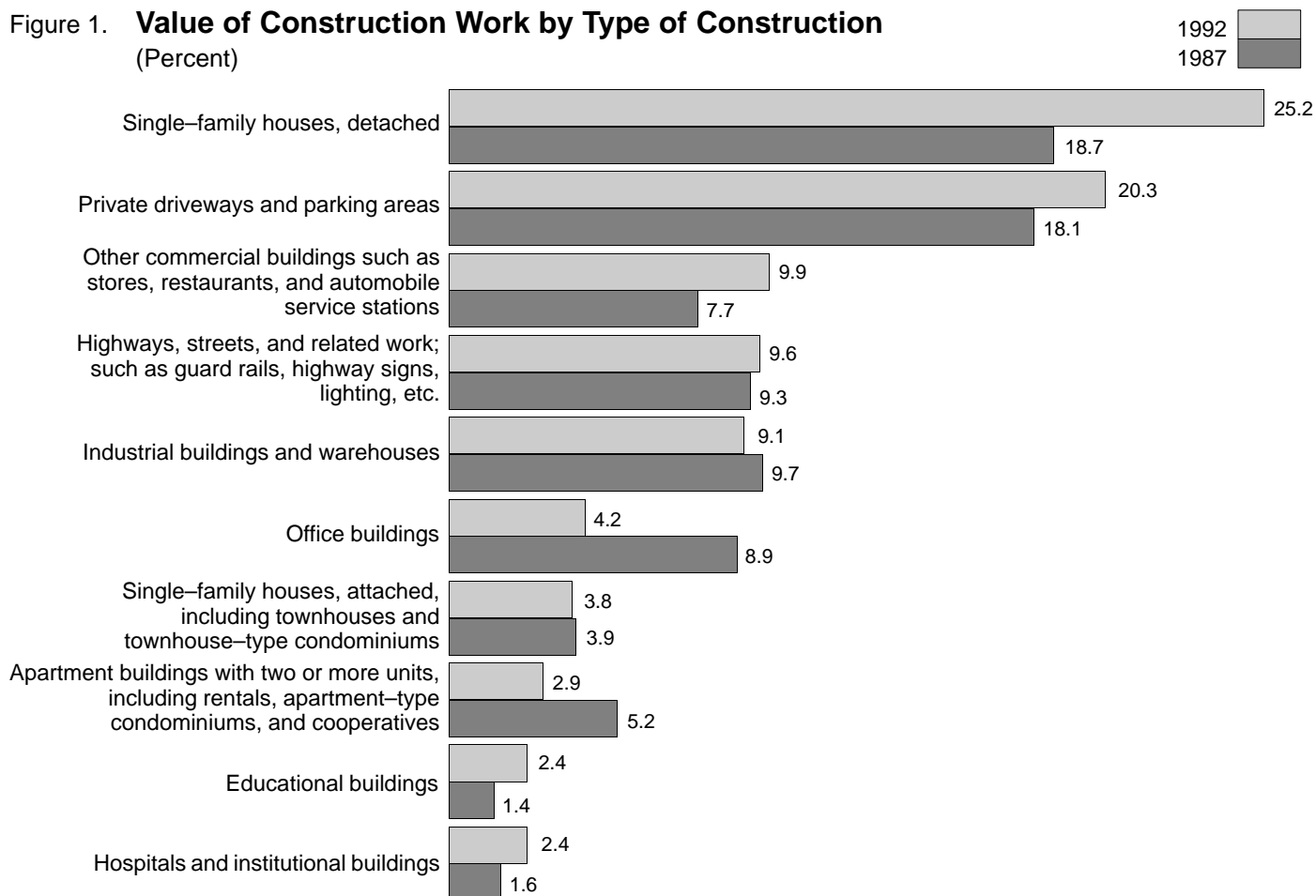


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

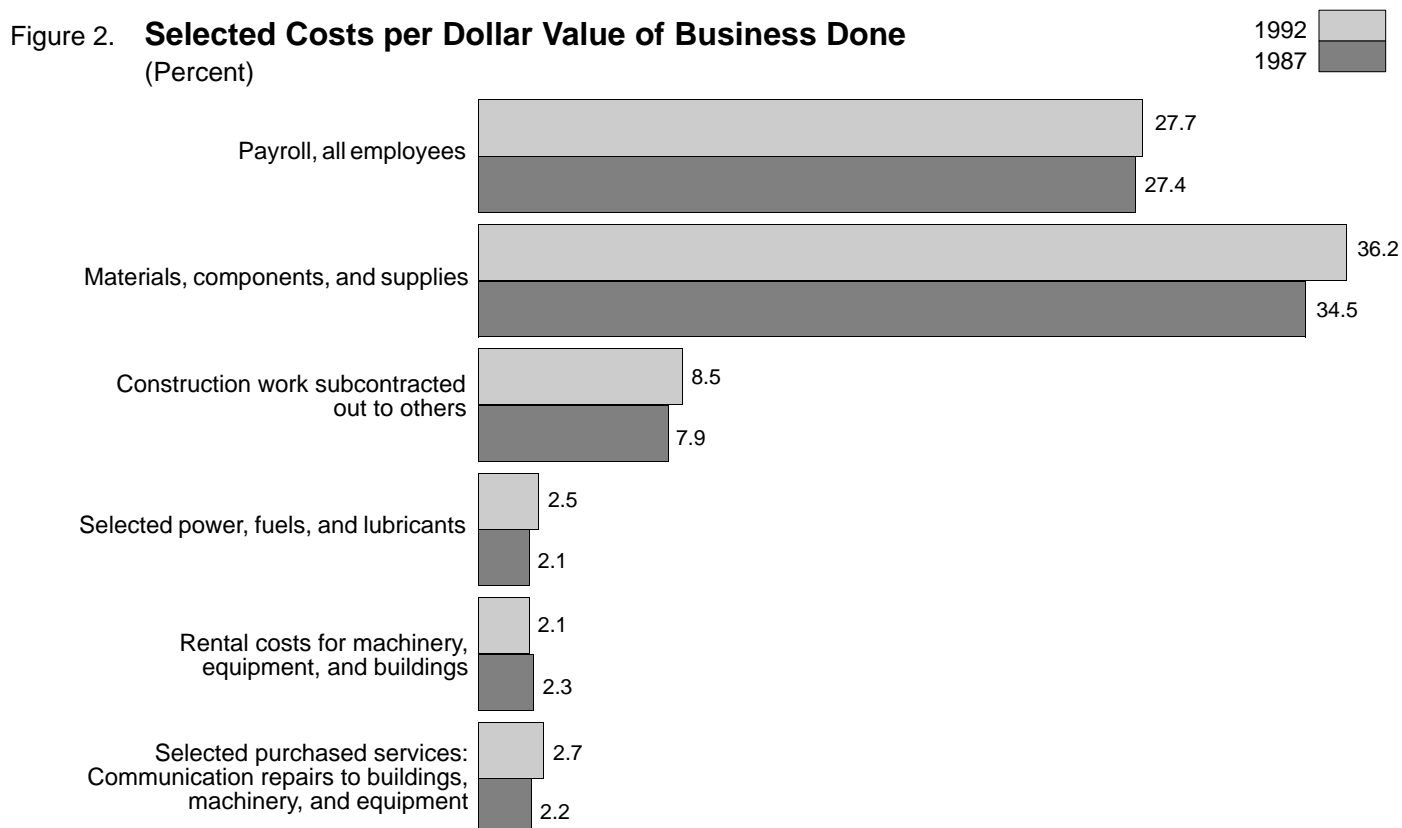


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	26 123	192 539	160 750	4 038 030	3 092 990	14 422 908	13 179 429	7 703 117	5 649 439
Alabama -----	279	2 345	2 033	35 886	27 887	125 081	116 216	72 084	46 393
Alaska -----	43	258	222	8 385	7 479	*31 038	25 938	14 620	*12 039
Arizona -----	421	5 472	4 547	105 657	81 055	364 087	345 660	193 148	164 747
Arkansas -----	197	1 614	1 345	24 628	18 319	96 379	89 716	53 137	38 555
California -----	3 017	25 854	21 565	641 284	485 989	2 222 462	1 963 081	1 191 770	780 285
Colorado -----	618	5 223	4 481	104 744	81 914	374 771	351 242	200 671	154 154
Connecticut -----	356	1 512	1 246	34 411	25 933	106 711	99 597	66 308	34 187
Delaware -----	106	898	766	16 481	12 766	50 932	45 442	28 398	17 210
District of Columbia -----	*12	(D)	166	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	1 470	10 159	8 324	185 129	137 540	624 162	570 944	357 150	221 282
Georgia -----	528	5 112	4 301	96 128	73 349	349 755	314 499	193 891	125 055
Hawaii -----	64	595	484	17 148	12 423	59 722	54 503	35 890	(D)
Idaho -----	195	859	769	14 688	12 271	62 073	59 096	38 683	(D)
Illinois -----	1 437	11 330	9 312	298 103	227 333	1 053 357	963 041	545 554	423 284
Indiana -----	616	4 247	3 564	80 553	63 083	287 332	268 788	154 475	116 980
Iowa -----	381	2 630	2 261	59 389	44 516	218 606	205 346	116 949	97 787
Kansas -----	343	2 738	2 269	51 134	37 616	173 495	164 681	89 127	77 460
Kentucky -----	336	2 232	1 853	36 673	29 537	128 096	113 479	67 505	47 087
Louisiana -----	133	972	785	13 175	10 283	59 287	54 232	30 774	23 552
Maine -----	245	1 162	982	21 968	17 434	83 865	79 142	47 355	31 787
Maryland -----	610	6 944	5 695	132 581	97 551	484 056	438 921	239 836	199 415
Massachusetts -----	555	3 173	2 711	73 405	59 325	263 499	243 691	150 240	94 124
Michigan -----	1 159	7 126	5 699	164 427	124 410	638 084	579 033	333 438	262 397
Minnesota -----	635	3 775	3 031	88 708	66 116	327 895	303 029	174 224	135 605
Mississippi -----	136	1 113	933	18 093	14 174	66 492	61 472	39 429	27 500
Missouri -----	744	5 030	4 283	99 414	77 906	329 350	309 788	177 880	134 326
Montana -----	164	578	512	8 710	7 568	40 825	38 454	22 067	18 754
Nebraska -----	178	1 235	1 091	22 418	17 859	89 442	83 574	46 363	37 758
Nevada -----	192	2 641	2 352	75 463	60 073	262 344	230 476	131 108	99 369
New Hampshire -----	145	603	521	12 532	10 120	43 811	42 321	26 256	16 243
New Jersey -----	585	3 788	3 194	101 896	79 144	337 570	313 709	182 542	135 358
New Mexico -----	139	998	835	16 505	12 850	62 044	57 881	32 309	25 572
New York -----	1 332	8 127	6 579	180 763	135 632	660 760	613 897	370 589	252 567
North Carolina -----	680	4 625	3 824	73 077	57 117	269 990	251 611	131 924	124 048
North Dakota -----	93	(D)	364	(D)	(D)	29 353	26 276	12 586	14 154
Ohio -----	1 159	9 720	8 263	226 928	183 530	807 378	732 737	389 283	350 857
Oklahoma -----	215	1 335	1 145	18 322	14 837	71 829	65 404	42 627	(D)
Oregon -----	361	2 103	1 699	50 462	38 491	168 068	156 900	97 215	(D)
Pennsylvania -----	1 158	7 347	6 195	163 767	127 115	606 263	558 776	334 940	230 320
Rhode Island -----	106	434	346	9 590	7 529	31 613	27 421	15 911	(D)
South Carolina -----	294	2 203	1 889	32 902	25 015	119 740	110 839	61 304	53 043
South Dakota -----	102	506	445	7 666	6 617	29 841	29 011	16 915	12 143
Tennessee -----	386	2 758	2 240	47 607	33 155	189 476	168 313	99 502	68 982
Texas -----	1 420	13 725	11 644	208 667	154 515	815 285	724 629	393 851	332 104
Utah -----	246	1 423	1 170	24 991	19 985	89 697	85 658	49 912	36 891
Vermont -----	131	413	349	7 985	6 485	27 793	26 920	15 877	12 442
Virginia -----	661	5 490	4 609	105 792	79 460	345 643	321 344	197 935	128 341
Washington -----	826	3 793	3 138	82 764	63 986	265 293	247 618	154 718	96 834
West Virginia -----	123	703	544	11 160	8 565	48 485	42 862	30 152	14 165
Wisconsin -----	719	4 614	3 807	106 456	80 775	383 970	363 352	211 449	158 742
Wyoming -----	73	412	367	7 290	6 404	(D)	(D)	(D)	12 198

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
1 243 479	8 806 421	312 771	330 208	3 234 505	218 194	15 055 670	8 443 003	1	1	3	U.S.
8 866	70 923	2 042	2 432	32 845	2 275	117 493	69 076	9	8	17	AL
*5 100	*23 649	871	835	7 461	264	21 222	12 340	23	38	14	AK
18 427	288 545	8 728	5 886	61 336	6 984	449 490	236 607	5	4	13	AZ
6 663	30 618	3 330	4 589	37 193	1 255	61 421	29 399	10	10	24	AR
259 381	1 568 896	50 313	26 569	345 119	33 363	2 781 887	1 518 217	2	2	8	CA
23 529	214 405	4 747	8 870	70 345	4 116	216 616	133 900	5	5	14	CO
7 115	53 691	2 425	2 582	35 576	2 970	234 193	148 811	8	7	39	CT
5 491	34 201	2 114	969	9 302	931	80 113	41 206	8	7	24	DE
(D)	1 962	(D)	(D)	(D)	80	*6 827	2 828	(D)	(D)	—	DC
53 218	427 944	13 837	13 853	132 667	15 711	784 294	455 722	4	4	15	FL
35 256	231 098	7 067	15 068	104 959	5 805	349 706	195 278	4	5	25	GA
*5 219	43 440	1 075	2 013	13 223	192	15 599	8 476	9	9	35	HI
(S)	25 895	(S)	1 478	11 059	385	22 063	12 178	13	14	37	ID
90 316	625 068	20 563	30 013	241 224	12 599	1 118 152	610 875	3	3	10	IL
18 544	168 577	3 456	7 264	76 682	3 715	233 190	131 763	5	3	18	IN
13 260	124 173	4 916	9 015	62 674	2 319	159 876	84 333	6	4	12	IA
8 814	99 950	5 712	5 602	49 148	2 386	174 651	101 367	7	7	19	KS
14 617	56 711	4 083	2 539	27 533	2 467	122 351	68 648	6	6	17	KY
5 055	24 281	1 236	1 652	*10 954	930	50 788	27 000	9	13	35	LA
4 724	26 472	741	2 374	33 740	1 086	65 415	35 026	9	9	19	ME
45 135	382 232	15 723	7 939	129 379	8 417	533 499	293 854	3	3	12	MD
19 809	177 484	6 288	4 772	72 157	4 442	320 081	197 318	5	5	13	MA
59 051	338 297	11 748	14 949	164 034	6 748	582 253	332 759	3	3	10	MI
24 866	208 936	6 883	12 373	91 723	4 135	339 958	200 254	5	5	12	MN
5 020	21 360	1 184	1 588	15 091	832	28 282	16 829	14	14	30	MS
19 561	196 189	5 646	10 053	86 948	6 306	400 481	233 113	5	4	16	MO
2 371	19 451	665	1 581	8 514	188	8 167	4 955	15	12	39	MT
5 867	44 383	1 341	2 569	21 366	1 427	66 191	35 031	11	9	21	NE
31 868	197 010	9 462	5 450	41 223	1 186	94 123	55 118	4	4	7	NV
1 490	27 607	790	969	12 115	1 485	90 859	52 940	11	13	24	NH
23 861	185 110	7 236	6 867	84 518	6 635	528 415	299 478	4	4	21	NJ
4 163	48 227	1 171	2 135	15 151	1 339	74 546	41 571	11	8	26	NM
46 863	291 023	11 738	8 251	151 390	10 998	952 856	556 442	7	3	14	NY
18 380	173 247	4 634	8 413	91 107	4 631	247 456	137 446	6	5	20	NC
3 078	14 909	(S)	1 039	(D)	272	11 407	6 402	(D)	12	31	ND
74 641	479 412	12 164	19 113	146 325	10 094	732 113	402 440	2	2	10	OH
6 425	41 233	1 371	*1 487	15 012	1 169	52 610	31 456	10	9	45	OK
11 168	121 361	4 166	4 313	51 604	1 508	86 577	54 399	7	6	15	OR
47 487	342 290	14 352	12 889	156 397	7 878	538 348	302 757	3	3	10	PA
4 191	15 231	1 131	1 083	13 156	716	49 511	34 543	7	6	5	RI
8 901	66 898	2 143	4 057	55 860	2 201	95 921	54 817	9	8	14	SC
830	19 614	*377	*4 154	*13 241	642	40 870	18 813	17	19	57	SD
21 164	87 563	2 938	4 628	46 653	2 285	138 877	70 049	8	6	27	TN
90 656	486 319	22 581	13 052	106 058	15 107	836 458	428 244	3	4	9	TX
4 039	39 465	*2 833	2 381	15 026	1 479	78 415	48 728	11	11	18	UT
873	15 444	830	887	8 486	479	33 392	16 126	12	13	31	VT
24 298	248 294	11 986	6 111	74 363	7 870	492 301	269 927	4	3	17	VA
17 676	179 057	6 545	7 527	50 219	3 348	224 176	142 499	5	4	17	WA
5 622	(S)	(D)	815	10 304	634	42 104	22 503	14	10	32	WV
20 618	175 412	4 718	14 361	106 831	3 662	257 993	151 330	4	4	17	WI
(D)	11 969	313	(D)	3 705	224	12 062	7 794	7	(D)	22	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	26 123	23 422	19 986	16 974	1	1	1	2
Proprietors and working partners	11 399	7 166	8 708	11 616	2	3	2	3
All employees**	192 539	218 194	157 241	118 116	1	1	1	1
Construction workers:								
March	128 140	154 271	106 893	83 052	1	1	1	1
May	170 607	196 024	143 276	114 935	1	1	1	1
August	181 828	209 991	155 141	121 509	1	1	1	1
November	162 426	187 138	136 673	108 448	1	1	1	1
Average	160 750	186 840	137 832	107 085	1	1	1	1
Other employees:								
March	30 890	31 120	19 135	10 011	1	1	1	1
May	32 214	31 639	(NA)	(NA)	1	1	(NA)	(NA)
August	32 278	31 665	(NA)	(NA)	1	1	(NA)	(NA)
November	31 774	30 979	(NA)	(NA)	1	1	(NA)	(NA)
Average	31 789	31 353	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	4 038 030	4 174 568	2 309 814	1 209 879	1	1	1	1
Payroll, construction workers	3 092 990	3 278 057	1 901 567	1 042 622	1	1	1	1
Payroll, other employees	945 040	896 511	408 247	167 257	1	1	1	1
First-quarter payroll, all employees	744 645	802 111	418 475	208 082	1	1	1	1
Fringe benefits, all employees	956 198	928 542	424 267	242 954	1	1	1	1
Legally required expenditures	659 814	655 522	328 610	141 330	1	1	1	1
Voluntary expenditures	296 384	273 019	95 657	101 624	1	1	1	1
Dollar value of business done	14 596 035	15 212 049	8 376 774	4 151 856	1	1	1	1
Value of construction work	14 422 908	15 055 670	8 207 000	4 097 293	1	1	1	1
Value of construction work subcontracted in from others	8 806 421	9 045 744	4 525 480	2 712 237	1	1	(NA)	(NA)
Other business receipts	173 128	156 378	169 774	54 564	4	3	1	4
Net value of construction work†	13 179 429	13 853 510	7 447 221	3 862 143	1	1	1	1
Value added††	7 703 117	8 443 003	4 491 568	2 227 880	1	1	1	1
Selected costs	6 892 918	6 769 045	3 885 206	1 923 977	1	1	1	1
Materials, components, and supplies	5 282 130	5 242 978	2 878 175	1 595 677	1	1	1	1
Construction work subcontracted out to others	1 243 479	1 202 160	759 779	235 150	2	1	1	1
Selected power, fuels, and lubricants	367 309	323 906	247 251	93 150	1	1	1	1
Electricity	36 817	28 072	22 030	6 614	2	2	1	2
Natural and manufactured gas	14 607	10 223	11 120	3 613	3	3	2	2
Gasoline and diesel fuel	291 651	263 008	198 489	74 480	1	1	1	1
On highway use	231 752	215 662	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	59 899	47 345	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases	24 234	22 602	15 610	8 445	3	2	3	2
Rental cost for machinery, equipment, and buildings	312 771	346 382	170 175	65 864	2	2	1	2
For machinery and equipment	225 865	277 328	143 619	56 651	3	2	1	2
For buildings	86 906	69 054	26 556	9 213	3	3	2	2
Selected purchased services	397 194	332 871	200 254	104 935	2	1	1	9
Communication services	100 450	65 724	36 076	32 193	2	2	2	29
Repairs to buildings and other structures	15 243	14 478	7 285	3 380	5	4	4	3
Repairs to machinery and equipment	281 500	252 667	156 892	69 362	2	2	1	2
Ownership of construction projects:								
Value of construction work	14 422 908	15 055 670	8 207 000	4 097 293	1	1	1	1
Government owned	2 738 443	2 265 359	1 965 071	373 780	2	2	2	2
Federal	511 794	467 051	(NA)	(NA)	4	3	(NA)	(NA)
State and local	2 226 649	1 798 308	(NA)	(NA)	2	2	(NA)	(NA)
Privately owned	11 684 465	12 790 310	6 241 929	3 723 513	1	1	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	3 058 345	2 258 782	2	2
Capital expenditures, other than land -----	330 208	366 126	3	2
New -----	233 671	285 927	3	2
Used -----	96 537	80 199	5	4
Retirements and disposition of depreciable assets -----	154 048	108 316	6	6
End-of-year gross book value of depreciable assets -----	3 234 505	2 516 592	2	2
Depreciation charges during year -----	363 320	335 624	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	276 592	319 574	5	4
Capital expenditures, other than land -----	17 920	32 314	9	6
New buildings and other structures -----	11 330	22 751	10	8
Used buildings and other structures -----	6 590	9 563	16	10
Retirements and disposition of depreciable assets -----	6 743	11 234	25	13
End-of-year gross book value of depreciable assets -----	287 770	340 653	5	4
Depreciation charges during year -----	23 275	29 804	6	6
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	2 781 753	1 939 208	2	2
Capital expenditures, other than land -----	312 288	333 812	3	2
New machinery and equipment, including automobiles and trucks -----	222 341	263 176	3	2
New automobiles and trucks, intended primarily for highway use -----	82 765	126 544	4	3
Used machinery and equipment, including automobiles and trucks -----	89 947	70 635	5	4
Retirements and disposition of depreciable assets -----	147 305	97 081	6	6
End-of-year gross book value of depreciable assets -----	2 946 736	2 175 938	2	2
Depreciation charges during year -----	340 044	305 820	2	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	26 123	1
Value of construction work	14 422 908	1
Establishments with inventories:		
Number	4 830	2
Value of construction work	4 260 897	1
Inventories¹:		
End of 1992, materials and supplies	77 863	4
End of 1991, materials and supplies	80 605	4
Establishments with no inventories:		
Number	11 287	1
Value of construction work	6 848 882	1
Establishments not reporting:		
Number	10 006	1
Value of construction work	3 313 129	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	26 123	14 812	6 322	3 146	1 442	305	85	8	2	2	
All employees** -----	192 539	31 086	39 836	40 861	42 108	20 702	11 633	2 681	3 633	(D)	
Payroll, all employees -----	4 038 030	469 164	711 839	843 906	1 031 189	542 893	303 601	73 143	62 295	(D)	
Dollar value of business done -----	14 596 035	2 293 932	2 606 427	2 869 857	3 393 738	1 843 374	1 118 628	225 391	244 688	(D)	
Value of construction work -----	14 422 908	2 275 555	2 587 058	2 836 436	3 344 431	1 812 368	1 104 161	218 211	244 688	(D)	
Net value of construction work† -----	13 179 429	2 105 418	2 424 597	2 626 711	3 040 170	1 622 531	961 246	398 755	(D)	(D)	
Value added†† -----	7 703 117	1 179 615	1 389 562	1 549 340	1 781 992	964 740	606 141	141 972	89 755	(D)	
Cost of materials, components, supplies, and fuels -----	5 649 439	944 180	1 054 405	1 110 792	1 307 485	688 797	369 572	174 208	(D)	(D)	
Cost of construction work subcontracted out to others -----	1 243 479	170 137	162 460	209 725	304 261	189 837	142 915	64 144	(D)	(D)	
Rental cost for machinery, equipment, and buildings -----	312 771	53 031	52 914	56 273	78 749	41 222	23 865	2 605	4 112	(D)	
Capital expenditures, other than land -----	330 208	58 114	63 156	67 410	82 499	33 044	17 973	8 012	(D)	(D)	
End-of-year gross book value of depreciable assets -----	3 234 505	533 570	614 428	651 659	798 531	340 893	219 991	50 610	24 823	(D)	
1987											
All employees** -----	218 194	(S)	38 833	44 969	47 630	25 437	21 396	6 032	6 742	(D)	
Value of construction work -----	15 055 670	(S)	2 278 812	2 849 297	3 549 510	2 099 879	1 735 326	879 760	(D)	(D)	
Value added†† -----	8 443 003	(S)	1 266 297	1 647 163	1 970 800	1 163 867	944 376	265 008	246 405	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	2	3	3	2	3	(Z)	(Z)	(Z)	(D)	
Net value of construction work† -----	1	3	3	2	1	1	(Z)	(Z)	(D)	(D)	
Capital expenditures, other than land -----	3	7	9	6	4	1	(Z)	(Z)	(D)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	26 123	(S)	(S)	(S)	7 756	5 505	3 292	2 033	612	240	113
All employees** -----	192 539	(S)	(S)	(S)	25 922	31 955	32 563	37 615	22 765	14 907	16 848
Payroll, all employees -----	4 038 030	(S)	(S)	(S)	333 662	552 156	628 598	892 114	599 286	448 379	499 968
Dollar value of business done -----	14 596 035	(S)	(S)	(S)	1 251 206	1 932 902	2 272 929	3 048 669	2 080 003	1 610 642	2 056 686
Value of construction work -----	14 422 908	(S)	(S)	(S)	1 242 535	1 924 347	2 247 544	3 010 657	2 056 758	1 582 523	2 017 919
Net value of construction work† -----	13 179 429	(S)	(S)	(S)	1 177 248	1 834 783	2 117 929	2 758 421	1 854 544	1 409 081	1 701 753
Value added†† -----	7 703 117	(S)	(S)	(S)	690 819	1 061 197	1 214 436	1 629 570	1 068 219	813 809	1 032 989
Cost of materials, components, supplies, and fuels -----	5 649 439	(S)	(S)	(S)	495 100	782 141	928 878	1 166 863	809 570	623 391	707 531
Cost of construction work subcontracted out to others -----	1 243 479	(S)	(S)	(S)	65 288	89 564	129 615	252 237	202 214	173 441	316 166
Rental cost for machinery, equipment, and buildings -----	312 771	(S)	(S)	(S)	28 326	42 119	48 447	63 961	39 799	35 031	48 342
Capital expenditures, other than land -----	330 208	(S)	(S)	(S)	28 692	47 737	62 115	73 214	43 882	37 658	29 895
End-of-year gross book value of depreciable assets -----	3 234 505	(S)	(S)	(S)	272 864	449 055	544 254	696 513	476 770	351 255	364 543
1987											
All employees** -----	218 194	(S)	(S)	(S)	27 190	32 021	32 607	39 960	26 647	19 366	28 137
Value of construction work -----	15 055 670	(S)	(S)	(S)	1 143 151	1 586 537	2 071 544	2 980 374	2 320 521	1 687 235	2 938 966
Value added†† -----	8 443 003	(S)	(S)	(S)	676 714	926 305	1 157 218	1 685 131	1 296 324	932 277	1 568 897
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	(S)	3	3	3	2	1	(Z)	(Z)
Net value of construction work† -----	1	(S)	(S)	(S)	3	3	3	2	1	1	(Z)
Capital expenditures, other than land -----	3	(S)	(S)	(S)	8	8	8	7	3	1	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

19—8 CONCRETE WORK

CONSTRUCTION—INDUSTRY SERIES

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	14 422 908	9 974 526	2 246 007	2 080 518	1	1	1	2
Building construction	9 002 047	6 947 107	1 162 945	891 995	1	1	2	3
Single-family houses	4 173 892	3 447 963	381 710	344 219	1	2	3	4
Single-family houses, detached	3 629 974	2 991 622	338 597	299 754	2	2	4	4
Single-family houses, attached, including townhouses and townhouse-type condominiums	543 918	456 341	43 113	44 465	4	4	10	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	412 200	297 136	37 408	77 655	4	4	8	9
Other residential buildings, including hotels, motels, and tourist cabins	87 477	65 929	10 887	10 660	7	8	9	16
Office buildings	606 308	463 606	92 594	50 108	2	2	5	6
Other commercial buildings such as stores, restaurants, and automobile service stations	1 420 884	1 087 747	193 490	139 647	2	2	3	6
Industrial buildings and warehouses	1 316 171	894 142	233 985	188 044	2	2	4	4
Industrial buildings	941 792	592 348	196 736	152 707	3	3	4	5
Warehouses	374 380	301 794	37 249	35 337	3	3	7	9
Religious buildings	106 632	71 711	21 467	13 454	4	5	6	6
Educational buildings	343 404	255 513	61 683	26 208	3	2	5	8
Hospitals and institutional buildings	349 586	229 295	100 567	19 724	2	2	4	6
Farm buildings, nonresidential	82 868	59 298	13 138	10 432	8	8	19	23
Other nonresidential buildings	102 626	74 767	16 015	11 845	7	7	10	28
Nonbuilding construction	5 299 003	3 027 419	1 083 061	1 188 522	1	1	2	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 378 784	795 568	311 080	272 137	2	3	3	4
Outdoor swimming pools	114 152	94 437	12 732	6 983	10	11	20	19
Private driveways and parking areas	2 300 267	1 574 690	596 987	758 590	2	2	3	4
Recreational facilities	120 799	69 755	30 281	20 763	8	10	7	15
Bridges, tunnels, and elevated highways	164 771	110 333	33 876	20 562	5	6	3	12
Sewers, water mains, and related facilities	84 785	60 832	15 461	8 492	6	7	5	11
Blast furnaces, petroleum refineries, chemical complexes, etc.	92 834	48 639	13 170	31 025	5	7	13	3
Sewage treatment and water treatment plants	116 300	80 221	24 221	11 859	3	3	3	12
Other nonbuilding construction	296 310	192 945	45 254	58 111	4	3	11	10
Construction work, n.s.k.	121 858	(NA)	(NA)	(NA)	8	(NA)	(NA)	(NA)
1987								
Value of construction work	15 055 670	11 376 824	1 586 290	1 442 529	1	1	2	2
Building construction	9 318 387	7 906 164	814 656	597 567	1	1	2	3
Single-family houses	3 402 452	2 963 395	259 197	179 860	1	2	5	5
Single-family houses, detached	2 820 963	2 437 056	231 851	152 055	2	2	5	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	581 489	526 338	27 345	27 804	3	3	6	7
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	779 680	696 792	32 837	50 050	3	4	4	7
Other residential buildings, including hotels, motels, and tourist cabins	446 670	397 637	28 296	20 735	2	2	7	10
Hotels, motels, and tourist cabins	241 110	220 360	13 086	7 662	3	3	7	10
Other residential buildings	205 560	177 276	15 210	13 073	3	3	12	14
Office buildings	1 340 326	1 206 300	81 088	52 938	2	2	4	4
Other commercial buildings such as stores, restaurants, and automobile service stations	1 159 451	954 890	127 518	77 042	2	2	4	6
Industrial buildings and warehouses	1 458 714	1 174 108	147 931	136 674	2	2	4	4
Industrial buildings	982 416	768 880	103 408	110 127	2	2	5	5
Warehouses	476 297	405 227	44 523	26 546	3	3	7	11
Educational buildings	210 194	149 094	43 592	17 507	4	5	6	7
Hospitals and institutional buildings	241 398	167 485	59 646	14 266	2	2	3	9
Other nonresidential buildings	279 502	196 463	34 551	48 495	5	5	14	11
Nonbuilding construction	5 087 257	3 470 661	771 634	844 961	1	1	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	1 399 526	965 779	233 300	200 447	2	2	3	3
Outdoor swimming pools	150 170	126 598	10 494	13 077	7	7	11	9
Private driveways and parking areas	2 729 423	1 785 741	435 681	508 001	2	2	3	3
Sewers, water mains, and related facilities	102 224	80 944	9 704	11 575	8	8	16	14
Sewage treatment and water treatment plants	98 400	70 823	10 416	17 159	15	19	10	24
Other nonbuilding construction	607 514	440 776	72 039	94 702	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	650 026	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments -----	26 123	192 539	4 038 030	14 422 908	9 268 860	13 179 429	7 703 117	1 243 479	1	1	2
Establishments not specializing by type -----	4 359	48 182	1 100 808	3 641 387	(NA)	3 301 973	2 014 800	339 414	2	1	2
Establishments specializing 51 percent or more -----	21 764	144 358	2 937 223	10 781 521	9 268 860	9 877 456	5 688 317	904 065	1	1	2
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	9 471	53 216	960 341	3 488 214	3 046 380	3 310 094	1 832 104	178 120	2	2	4
Establishments with —											
100 percent specialization -----	4 593	21 326	363 792	1 328 218	1 328 218	1 262 906	695 052	65 311	3	3	8
90 to 99 percent specialization -----	1 660	11 021	213 587	784 020	727 045	739 157	390 864	44 863	5	5	13
80 to 89 percent specialization -----	1 203	8 042	135 980	515 540	425 242	488 493	268 858	27 048	7	5	6
70 to 79 percent specialization -----	1 053	5 894	104 956	381 203	278 882	366 759	208 610	14 444	6	5	10
60 to 69 percent specialization -----	709	5 229	106 314	349 259	216 912	331 240	200 730	18 019	6	5	6
51 to 59 percent specialization -----	253	1 703	35 711	129 975	70 082	121 540	67 990	8 435	12	10	13
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	694	4 571	84 265	299 300	256 719	278 573	154 420	20 727	8	7	18
Establishments with —											
100 percent specialization -----	336	2 117	38 139	134 459	134 459	122 257	73 991	12 201	12	11	30
90 to 99 percent specialization -----	(S)	662	11 895	41 012	38 344	38 937	18 694	(S)	17	15	(S)
80 to 89 percent specialization -----	56	439	8 291	32 364	26 667	31 223	13 908	1 141	20	20	32
70 to 79 percent specialization -----	67	311	6 052	26 313	19 285	25 019	13 874	1 294	27	32	27
60 to 69 percent specialization -----	(S)	637	11 886	40 815	25 141	38 144	21 218	2 671	20	15	13
51 to 59 percent specialization -----	(S)	405	8 001	24 337	12 823	22 994	12 734	1 344	24	18	19
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type -----	273	2 616	59 619	197 266	161 395	174 540	108 467	22 727	9	8	14
Establishments with —											
100 percent specialization -----	86	702	20 541	64 837	64 837	57 684	35 228	7 152	13	9	4
90 to 99 percent specialization -----	22	432	9 702	24 823	22 521	22 603	18 437	2 220	18	19	24
80 to 89 percent specialization -----	45	288	5 891	20 702	17 430	18 668	8 629	*2 034	28	31	47
70 to 79 percent specialization -----	73	554	10 449	37 866	27 808	34 997	22 018	2 869	25	22	39
60 to 69 percent specialization -----	36	308	5 727	28 297	17 715	22 802	12 974	*5 495	29	31	51
51 to 59 percent specialization -----	11	333	7 309	20 741	11 082	17 786	11 180	2 955	13	13	9
OFFICE BUILDINGS											
All establishments specializing in type -----	240	2 469	66 105	219 482	168 549	193 339	115 961	26 143	7	4	3
Establishments with —											
100 percent specialization -----	(S)	671	14 848	49 692	49 692	44 156	28 326	5 536	17	9	7
90 to 99 percent specialization -----	*17	(D)	(D)	(D)	(D)	(D)	(D)	*267	(D)	(D)	65
80 to 89 percent specialization -----	(S)	483	11 163	29 145	23 743	(D)	18 943	(D)	19	13	(D)
70 to 79 percent specialization -----	22	513	18 492	60 196	43 426	53 454	35 056	6 742	7	7	9
60 to 69 percent specialization -----	35	575	17 009	68 165	41 806	(D)	26 189	(D)	10	6	(D)
51 to 59 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	1 294	11 818	247 482	895 564	742 152	803 054	476 022	92 510	4	4	5
Establishments with —											
100 percent specialization -----	498	4 240	87 778	336 334	336 334	297 584	180 941	38 750	7	6	9
90 to 99 percent specialization -----	181	1 668	35 420	128 081	118 305	119 362	68 413	8 719	10	11	21
80 to 89 percent specialization -----	144	1 549	30 602	107 467	87 375	95 436	48 970	12 032	11	10	15
70 to 79 percent specialization -----	182	1 499	27 968	96 426	69 793	88 303	50 666	8 123	15	14	22
60 to 69 percent specialization -----	209	1 639	33 640	108 197	66 795	95 421	52 696	12 776	12	9	12
51 to 59 percent specialization -----	81	1 223	32 075	119 059	63 550	106 948	74 336	12 111	11	7	5
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	705	7 482	172 240	566 302	456 419	475 054	308 531	91 248	5	5	7
Establishments with —											
100 percent specialization -----	261	2 509	58 333	183 385	183 385	155 732	101 356	27 652	8	8	16
90 to 99 percent specialization -----	(S)	(S)	16 764	49 865	46 064	40 558	31 504	(S)	(S)	10	(S)
80 to 89 percent specialization -----	45	605	15 713	53 596	44 084	39 791	23 989	13 806	15	10	6
70 to 79 percent specialization -----	130	1 346	32 896	121 248	89 060	102 708	64 361	18 541	13	13	22
60 to 69 percent specialization -----	126	1 380	32 078	98 591	61 753	88 529	56 918	10 062	12	14	18
51 to 59 percent specialization -----	67	702	16 456	59 618	32 073	47 736	30 402	11 881	12	7	3
WAREHOUSES											
All establishments specializing in type -----	168	1 822	40 935	131 290	104 482	121 290	66 827	10 000	9	6	14
Establishments with —											
100 percent specialization -----	74	632	12 165	36 290	36 290	35 540	24 629	750	18	10	26
90 to 99 percent specialization -----	23	207	6 205	20 422	18 451	18 477	5 157	1 945	25	14	15
80 to 89 percent specialization -----	32	263	4 843	17 668	14 851	15 471	9 539	2 197	24	16	22
70 to 79 percent specialization -----	*18	224	2 925	9 353	6 679	8 017	4 215	*1 336	36	35	64
60 to 69 percent specialization -----	15	249	6 278	22 553	14 513	20 257	11 185	*2 296	20	23	42
51 to 59 percent specialization -----	7	248	8 520	25 004	13 698	23 529	12 103	1 475	(Z)	(Z)	(Z)

19-10 CONCRETE WORK

CONSTRUCTION—INDUSTRY SERIES

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992—Con.

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H	I	J	K	L
EDUCATIONAL BUILDINGS											
All establishments specializing in type	134	1 681	44 814	112 995	85 599	101 102	70 910	11 893	8	7	13
Establishments with —											
100 percent specialization	*17	435	13 566	26 436	26 436	24 961	19 973	1 475	9	1	(Z)
90 to 99 percent specialization	(S)	82	1 509	2 516	2 282	(D)	(S)	(D)	9	7	(D)
80 to 89 percent specialization	31	302	6 310	23 179	18 662	17 991	15 893	5 188	24	27	30
70 to 79 percent specialization	12	295	6 837	18 508	13 295	17 100	10 780	1 409	30	15	26
60 to 69 percent specialization	45	391	10 865	27 354	16 632	24 814	14 684	2 540	8	10	4
51 to 59 percent specialization	(S)	177	5 726	15 002	8 292	(D)	8 079	(D)	31	13	(D)
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type	90	1 331	38 243	108 101	92 718	91 682	55 160	16 419	7	4	4
Establishments with —											
100 percent specialization	*26	304	10 376	38 980	38 980	(D)	16 777	(D)	7	5	(D)
90 to 99 percent specialization	*7	125	3 316	(D)	(D)	(D)	4 580	(D)	20	(D)	(D)
80 to 89 percent specialization	*15	401	11 581	30 519	24 985	27 098	14 831	3 421	15	5	4
70 to 79 percent specialization	29	236	7 132	16 987	12 464	14 690	9 631	2 297	17	15	25
60 to 69 percent specialization	*13	266	5 838	(D)	(D)	12 249	9 341	(D)	20	(D)	(D)
51 to 59 percent specialization	—	—	—	—	—	—	—	—	—	—	—
HIGHWAYS, STREETS, AND RELATED WORK SUCH AS INSTALLATION OF GUARD RAILS, HIGHWAY SIGNS, LIGHTING, ETC.											
All establishments specializing in type	1 179	10 380	239 859	844 328	762 454	783 157	442 236	61 171	4	3	6
Establishments with —											
100 percent specialization	695	5 621	121 066	420 118	420 118	392 689	223 469	27 429	7	6	11
90 to 99 percent specialization	231	1 571	36 691	139 511	130 078	127 512	71 201	11 999	11	10	14
80 to 89 percent specialization	94	1 467	36 800	125 445	103 527	118 512	62 055	6 933	7	5	5
70 to 79 percent specialization	80	900	23 119	89 058	65 249	81 003	47 318	8 055	10	8	6
60 to 69 percent specialization	(S)	593	16 892	52 617	33 745	47 748	28 524	4 869	12	8	2
51 to 59 percent specialization	11	228	5 292	17 579	9 737	15 693	9 668	1 886	25	18	13
OUTDOOR SWIMMING POOLS											
All establishments specializing in type	158	1 374	29 799	95 510	91 587	94 539	54 130	971	13	12	20
Establishments with —											
100 percent specialization	123	1 072	22 924	70 095	70 095	69 420	40 754	675	15	15	29
90 to 99 percent specialization	*29	217	5 128	16 840	15 535	(D)	9 671	(D)	29	26	(D)
80 to 89 percent specialization	*4	(S)	(S)	(S)	(S)	(S)	*685	—	(S)	(S)	—
70 to 79 percent specialization	—	—	—	—	—	—	—	—	—	—	—
60 to 69 percent specialization	*3	*54	1 097	*5 485	*3 485	(D)	*3 020	(D)	56	46	(D)
51 to 59 percent specialization	—	—	—	—	—	—	—	—	—	—	—
PRIVATE DRIVEWAYS AND PARKING AREAS											
All establishments specializing in type	5 785	36 099	750 751	3 039 189	2 613 127	2 762 478	1 587 717	276 711	2	2	5
Establishments with —											
100 percent specialization	4 045	20 258	376 459	1 522 649	1 522 649	1 392 313	795 883	130 336	3	3	11
90 to 99 percent specialization	520	3 572	76 331	295 782	275 433	274 160	156 143	21 622	7	7	12
80 to 89 percent specialization	343	2 543	56 023	252 740	209 056	229 666	132 589	23 074	7	7	16
70 to 79 percent specialization	322	3 098	74 871	273 536	200 407	241 739	131 045	31 797	8	6	4
60 to 69 percent specialization	389	4 120	98 444	395 651	245 371	363 788	206 889	31 863	5	4	4
51 to 59 percent specialization	165	2 509	68 623	298 831	160 212	260 813	165 169	38 018	6	4	3
RECREATIONAL FACILITIES											
All establishments specializing in type	199	1 173	24 721	103 422	93 601	89 636	50 865	13 786	11	9	8
Establishments with —											
100 percent specialization	135	664	13 215	52 705	52 705	46 527	25 814	6 179	14	13	8
90 to 99 percent specialization	(S)	235	5 555	25 308	23 126	22 365	12 614	2 943	25	16	9
80 to 89 percent specialization	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
70 to 79 percent specialization	*18	*175	3 569	15 799	11 399	12 995	6 123	2 804	40	35	33
60 to 69 percent specialization	—	—	—	—	—	—	—	—	—	—	—
51 to 59 percent specialization	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
BLAST FURNACES, PETROLEUM REFINERIES, CHEMICAL COMPLEXES, ETC.											
All establishments specializing in type	35	961	24 965	91 824	76 218	78 696	50 652	13 128	9	6	9
Establishments with —											
100 percent specialization	10	334	8 523	35 033	35 033	31 304	16 123	3 729	6	6	18
90 to 99 percent specialization	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
80 to 89 percent specialization	9	165	5 544	23 151	18 959	(D)	14 928	(D)	21	8	(D)
70 to 79 percent specialization	*9	302	5 330	15 484	11 457	14 316	11 037	1 168	23	16	35
60 to 69 percent specialization	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
51 to 59 percent specialization	*4	(D)	(D)	(D)	(D)	*6 457	(D)	(D)	(D)	(D)	(D)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	26 123	160 750	128 140	170 607	181 828	162 426	1	1	1	1	1	1
Alabama	279	2 033	1 798	2 207	2 209	1 916	9	9	8	9	9	11
Alaska	43	222	(D)	243	324	(D)	20	26	(D)	25	24	(D)
Arizona	421	4 547	4 251	4 618	4 867	4 454	6	5	5	5	5	5
Arkansas	197	1 345	1 198	1 365	1 433	1 383	8	10	11	10	10	11
California	3 017	21 565	20 371	22 467	22 642	20 780	2	2	2	2	2	2
Colorado	618	4 481	3 474	4 659	5 211	4 580	5	5	5	5	5	6
Connecticut	356	1 246	660	1 246	1 607	1 470	6	7	10	7	8	10
Delaware	106	766	642	792	883	747	11	9	11	9	9	10
District of Columbia	*12	166	(D)	157	174	(D)	45	7	(D)	7	6	(D)
Florida	1 470	8 324	8 091	8 860	8 445	7 901	4	4	4	4	4	4
Georgia	528	4 301	3 831	4 406	4 540	4 425	6	5	5	5	6	5
Hawaii	64	484	467	482	475	511	17	9	9	9	10	10
Idaho	195	769	598	783	875	820	8	13	15	13	13	15
Illinois	1 437	9 312	5 994	10 191	11 203	9 858	3	3	4	3	3	3
Indiana	616	3 564	2 561	3 706	4 223	3 768	4	5	6	5	5	6
Iowa	381	2 261	1 432	2 590	2 782	2 239	6	6	7	7	6	6
Kansas	343	2 269	1 835	2 483	2 595	2 163	6	7	7	7	7	7
Kentucky	336	1 853	1 402	1 954	2 084	1 972	6	6	8	6	7	6
Louisiana	133	785	695	868	903	672	7	9	10	9	12	13
Maine	245	982	473	1 098	1 351	1 008	9	9	10	10	9	10
Maryland	610	5 695	4 706	6 016	6 415	5 645	6	3	3	3	3	4
Massachusetts	555	2 711	1 691	2 850	3 230	3 074	6	5	7	5	6	5
Michigan	1 159	5 699	3 045	6 380	7 227	6 142	4	3	5	4	3	3
Minnesota	635	3 031	1 536	3 576	4 014	2 998	5	5	8	5	5	6
Mississippi	136	933	856	897	1 057	924	13	15	14	12	19	19
Missouri	744	4 283	3 604	4 583	4 978	3 969	5	5	5	5	5	5
Montana	164	512	393	522	618	515	10	15	15	16	15	16
Nebraska	178	1 091	823	1 294	1 294	952	11	11	14	12	12	11
Nevada	192	2 352	2 224	2 360	2 512	2 310	7	5	5	5	5	5
New Hampshire	145	521	341	556	654	534	11	12	16	11	10	12
New Jersey	585	3 194	2 394	3 425	3 720	3 238	6	5	5	4	5	5
New Mexico	139	835	756	855	860	869	12	11	12	10	12	12
New York	1 332	6 579	3 898	7 157	8 019	7 242	4	7	11	6	6	10
North Carolina	680	3 824	3 384	3 965	4 048	3 900	5	5	5	5	5	6
North Dakota	93	364	216	398	475	369	11	11	12	11	11	14
Ohio	1 159	8 263	5 567	8 873	9 670	8 943	3	2	3	3	3	3
Oklahoma	215	1 145	933	1 359	1 273	1 015	9	10	11	16	10	10
Oregon	361	1 699	1 561	1 714	1 833	1 687	6	7	7	7	8	9
Pennsylvania	1 158	6 195	4 378	6 724	7 160	6 518	4	3	4	3	3	3
Rhode Island	106	346	170	423	433	357	10	6	11	6	7	6
South Carolina	294	1 889	1 711	1 981	1 980	1 886	8	9	10	9	9	10
South Dakota	102	445	271	525	534	452	12	17	18	18	18	17
Tennessee	386	2 240	1 887	2 280	2 370	2 423	7	9	9	8	9	9
Texas	1 420	11 644	10 982	12 088	12 213	11 291	3	3	4	4	4	3
Utah	246	1 170	900	1 264	1 386	1 129	6	10	11	10	9	10
Vermont	131	349	201	396	465	334	12	13	14	14	12	17
Virginia	661	4 609	4 066	4 637	5 033	4 699	5	4	4	4	4	4
Washington	826	3 138	2 977	3 205	3 388	2 984	4	5	5	5	5	6
West Virginia	123	544	342	494	739	601	10	14	16	13	14	18
Wisconsin	719	3 807	1 980	4 228	4 982	4 038	5	4	6	4	5	5
Wyoming	73	367	271	409	420	365	9	7	8	7	7	6

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	14 422 908	26 042	13 598 629	2 898	824 279	15 055 671	-4.2	1	1	2
Alabama -----	122 567	279	105 796	63	16 770	102 097	20.0	7	7	13
Alaska -----	*31 838	43	*31 038	(S)	(S)	18 156	75.4	43	44	(S)
Arizona -----	353 631	405	340 627	14	13 003	459 107	-23.0	4	4	3
Arkansas -----	115 216	197	93 159	47	22 057	58 797	96.0	8	10	11
California -----	2 234 054	3 016	2 208 016	48	26 038	2 769 038	-19.3	2	2	10
Colorado -----	365 793	617	359 747	22	6 046	212 859	71.8	6	6	3
Connecticut -----	113 687	355	104 129	46	9 558	230 866	-50.8	7	7	7
Delaware -----	47 285	106	41 651	50	5 634	75 824	-37.6	6	7	11
District of Columbia -----	40 582	(S)	(D)	78	(D)	108 966	-62.8	1	(D)	(D)
Florida -----	624 985	1 469	605 108	54	19 877	807 487	-22.6	4	4	5
Georgia -----	344 037	528	320 798	114	23 238	351 354	-2.1	5	5	10
Hawaii -----	61 138	64	59 722	*18	*1 416	15 308	299.4	12	12	53
Idaho -----	65 593	(S)	60 719	28	4 874	26 954	143.4	14	15	37
Illinois -----	1 077 040	1 431	1 036 545	81	40 495	1 129 414	-4.6	2	3	3
Indiana -----	298 527	613	278 977	111	19 551	270 655	10.3	3	3	8
Iowa -----	211 833	381	194 070	78	17 763	141 964	49.2	5	5	27
Kansas -----	136 973	340	125 071	37	11 902	160 514	-14.7	7	8	13
Kentucky -----	166 220	336	121 062	116	45 159	140 794	18.1	5	7	3
Louisiana -----	63 027	131	52 250	34	10 777	66 626	-5.4	10	12	10
Maine -----	83 708	245	80 623	32	3 085	60 799	37.7	8	9	27
Maryland -----	428 591	604	391 285	123	37 305	410 596	4.4	3	4	9
Massachusetts -----	258 821	553	250 508	66	8 313	334 941	-22.7	5	5	11
Michigan -----	635 260	1 159	626 196	52	9 064	560 115	13.4	3	3	20
Minnesota -----	322 957	633	315 979	65	6 978	345 086	-6.4	5	5	15
Mississippi -----	77 564	136	63 589	44	13 975	34 280	126.3	12	14	17
Missouri -----	322 357	742	303 685	74	18 672	365 083	-11.7	4	4	22
Montana -----	41 507	164	40 646	15	860	9 886	319.9	12	12	14
Nebraska -----	83 546	178	78 407	31	5 139	60 357	38.4	9	10	39
Nevada -----	258 655	192	247 979	42	10 676	102 765	151.7	4	4	7
New Hampshire -----	45 250	144	37 756	73	7 494	100 002	-54.8	12	14	23
New Jersey -----	349 598	575	321 975	103	27 623	565 111	-38.1	4	4	9
New Mexico -----	64 506	131	60 719	29	*3 787	79 926	-19.3	8	8	49
New York -----	662 854	1 331	642 832	107	20 022	944 022	-29.8	3	3	15
North Carolina -----	291 836	680	264 668	70	27 168	267 268	9.2	5	5	5
North Dakota -----	29 275	93	24 991	9	4 284	14 863	97.0	12	14	4
Ohio -----	676 009	1 158	653 102	114	22 907	646 260	4.6	2	2	5
Oklahoma -----	73 522	215	66 994	35	6 529	57 256	28.4	9	10	11
Oregon -----	168 127	353	158 963	41	9 164	88 027	91.0	6	6	16
Pennsylvania -----	629 047	1 157	582 787	112	46 260	526 444	19.5	3	3	2
Rhode Island -----	33 552	106	27 886	39	5 666	45 382	-26.1	6	7	5
South Carolina -----	127 687	290	112 400	66	15 287	106 552	19.8	7	8	7
South Dakota -----	31 324	102	28 225	23	3 099	45 337	-30.9	17	18	34
Tennessee -----	182 099	386	164 341	57	17 758	187 971	-3.1	6	7	8
Texas -----	824 117	1 420	784 956	69	39 161	763 458	7.9	4	4	5
Utah -----	90 183	246	87 793	*15	2 389	70 723	27.5	11	11	34
Vermont -----	26 602	131	25 875	5	727	30 451	-12.6	13	13	34
Virginia -----	377 033	661	301 502	147	75 531	545 940	-30.9	3	4	3
Washington -----	286 915	826	254 791	37	32 124	233 812	22.7	4	4	2
West Virginia -----	59 800	123	46 307	81	13 493	46 474	28.7	8	9	16
Wisconsin -----	379 483	718	369 685	54	9 798	246 127	54.2	4	4	6
Wyoming -----	27 096	73	(D)	27	(D)	13 555	99.9	7	(D)	(D)

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	14 596 035	15 212 049	1	1
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS				
Heavy construction contractor	74 998	85 533	5	6
Highway and street general contractor	86 691	117 264	5	5
Paving contractor	1 451 284	864 799	3	4
SPECIAL TRADE CONTRACTORS				
Asphalt contractor, private driveways and parking areas	2 196 906	2 379 783	2	2
Concrete contractor, except paving of roads, highways, and streets	6 373 732	7 573 021	1	1
Culvert and curb construction contractor	1 007 883	234 340	3	7
Excavating, earth and land clearing contractor, connected with buildings	81 051	(NA)	7	(NA)
Foundation contractor, concrete	2 439 985	2 826 522	2	2
Gunite contractor	241 657	180 715	7	5
Other construction activities	464 021	592 703	3	(NA)
Other business activities	168 440	165 694	4	(NA)
Kind of business activity, n.s.k.	9 387	191 672	16	8

Table 12. **Selected Industry Ratios for Establishments With Payroll: 1992 and 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	7.4	9.3	1
Number of construction workers	6.2	8.0	1
Number of all other employees	1.2	1.3	1
Payroll, all employees \$1,000 ..	154.6	178.2	1
Payroll, construction workers do ..	118.4	140.0	1
Payroll, other employees do ..	36.2	38.3	1
Dollar value of business done do ..	558.7	649.5	1
Value of construction work do ..	552.1	642.8	1
Cost of materials, components, supplies, and fuels do ..	216.3	237.7	1
Construction work subcontracted to others do ..	47.6	51.3	2
Rental cost for machinery, equipment, and buildings do ..	12.0	14.8	2
Capital expenditures, other than land do ..	12.6	15.6	3
Gross book value of depreciable assets do ..	123.8	107.5	2
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	21.0	19.1	(Z)
Dollar value of business done do ..	75.8	69.7	1
Value added†† do ..	40.0	38.7	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	19.2	17.5	(Z)
Value of construction work do ..	89.7	80.6	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	29.7	28.6	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.280	.277	(Z)
Cost of materials, components, supplies, and fuels do ..	.392	.370	(Z)
Cost of construction work subcontracted out to others do ..	.086	.080	1
Value of construction work subcontracted in from others do ..	.611	.601	1
Rental cost for machinery, equipment, and buildings do ..	.022	.023	2

Table 13. **Selected Industry Ratios for Establishments With Payroll by State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	7.4	21.0	89.7	.280	.392	.086	.611	.022
Alabama -----	8.4	15.3	61.5	.287	.371	.071	.567	.016
Alaska -----	6.0	32.5	139.8	.270	.388	.164	.762	.028
Arizona -----	13.0	19.3	80.1	.290	.452	.051	.793	.024
Arkansas -----	8.2	15.3	71.7	.256	.400	.069	.318	.035
California -----	8.6	24.8	103.1	.289	.351	.117	.706	.023
Colorado -----	8.5	20.1	83.6	.279	.411	.063	.572	.013
Connecticut -----	4.2	22.8	85.6	.322	.320	.067	.503	.023
Delaware -----	8.5	18.4	66.5	.324	.338	.108	.671	.042
District of Columbia -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	6.9	18.2	75.0	.297	.355	.085	.686	.022
Georgia -----	9.7	18.8	81.3	.275	.358	.101	.661	.020
Hawaii -----	9.3	28.8	123.4	.287	(D)	.087	.727	.018
Idaho -----	4.4	17.1	80.7	.237	(D)	(S)	.417	(S)
Illinois -----	7.9	26.3	113.1	.283	.402	.086	.593	.020
Indiana -----	6.9	19.0	80.6	.280	.407	.065	.587	.012
Iowa -----	6.9	22.6	96.7	.272	.447	.061	.568	.022
Kansas -----	8.0	18.7	76.5	.295	.446	.051	.576	.033
Kentucky -----	6.7	16.4	69.1	.286	.368	.114	.443	.032
Louisiana -----	7.3	13.6	75.5	.222	.397	.085	.410	.021
Maine -----	4.7	18.9	85.4	.262	.379	.056	.316	.009
Maryland -----	11.4	19.1	85.0	.274	.412	.093	.790	.032
Massachusetts -----	5.7	23.1	97.2	.279	.357	.075	.674	.024
Michigan -----	6.2	23.1	112.0	.258	.411	.093	.530	.018
Minnesota -----	5.9	23.5	108.2	.271	.414	.076	.637	.021
Mississippi -----	8.2	16.3	71.3	.272	.414	.075	.321	.018
Missouri -----	6.8	19.8	76.9	.302	.408	.059	.596	.017
Montana -----	3.5	15.1	79.7	.213	.459	.058	.476	.016
Nebraska -----	6.9	18.2	82.0	.251	.422	.066	.496	.015
Nevada -----	13.7	28.6	111.5	.288	.379	.121	.751	.036
New Hampshire -----	4.2	20.8	84.1	.286	.371	.034	.630	.018
New Jersey -----	6.5	26.9	105.7	.302	.401	.071	.548	.021
New Mexico -----	7.2	16.5	74.3	.266	.412	.067	.777	.019
New York -----	6.1	22.2	100.4	.274	.382	.071	.440	.018
North Carolina -----	6.8	15.8	70.6	.271	.459	.068	.642	.017
North Dakota -----	(D)	(D)	80.6	(D)	.482	.105	.508	(S)
Ohio -----	8.4	23.3	97.7	.281	.435	.092	.594	.015
Oklahoma -----	6.2	13.7	62.7	.255	(D)	.089	.574	.019
Oregon -----	5.8	24.0	98.9	.300	(D)	.066	.722	.025
Pennsylvania -----	6.3	22.3	97.9	.270	.380	.078	.565	.024
Rhode Island -----	4.1	22.1	91.4	.303	(D)	.133	.482	.036
South Carolina -----	7.5	14.9	63.4	.275	.443	.074	.559	.018
South Dakota -----	5.0	15.2	67.1	.257	.407	.028	.657	.013
Tennessee -----	7.2	17.3	84.6	.251	.364	.112	.462	.016
Texas -----	9.7	15.2	70.0	.256	.407	.111	.597	.028
Utah -----	5.8	17.6	76.7	.279	.411	.045	.440	*.032
Vermont -----	3.1	19.3	79.6	.287	.448	.031	.556	.030
Virginia -----	8.3	19.3	75.0	.306	.371	.070	.718	.035
Washington -----	4.6	21.8	84.5	.312	.365	.067	.675	.025
West Virginia -----	5.7	15.9	89.1	.230	.292	.116	(S)	(D)
Wisconsin -----	6.4	23.1	100.9	.277	.413	.054	.457	.012
Wyoming -----	5.6	17.7	(D)	(D)	(D)	(D)	(D)	(D)

Appendix A.

Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

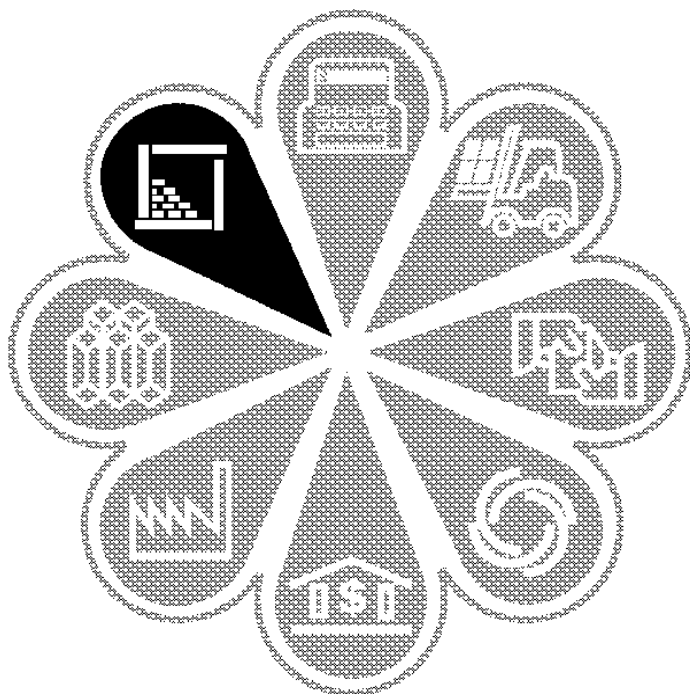
Census of Construction Industries

CC92-I-20

INDUSTRY SERIES

Water Well Drilling Special Trade Contractors

Industry 1781



1992

Census of

Construction Industries

CC92-I-20

INDUSTRY SERIES

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Special Trade Contractors

Industry 1781

Issued June 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Juliana Van Berkum**, **Susan L. Hostetter**, **Doris M. Kling**, **Carolyn J. Stone**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke**. Under the direction of **C. Lloyd Anderson**, the Systems Support Staff maintained the small computers and assisted in the management of computer output.

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If you have any questions concerning the statistics in this report, call 301-457-4680.



**Economics and Statistics
Administration**

Everett M. Ehrlich, Under Secretary
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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year— buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment.	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number.	2					
Other employees—quarterly.	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners.	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total.	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added.	1, 2, 8	1	5	6		8
Rental costs:						
Total.	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Summary of Findings

Establishments classified in this industry are primarily engaged in water well drilling and servicing water wells. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$1.75 billion in total dollar value of business. Of this amount, \$1.73 billion were for the value of construction work. These establishments paid out \$630 million for materials, components, and supplies and \$51.4 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$74.7 million. Value added for 1992 was \$995 million.

There were 3,638 establishments with total employment averaging 19,346 during the year. Total payroll for 1992 was \$444 million.

Larger establishments with 20 employees or more, while representing only 4 percent of the total number of employer establishments in this industry, accounted for 32 percent of all business done.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

A “construction establishment” is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

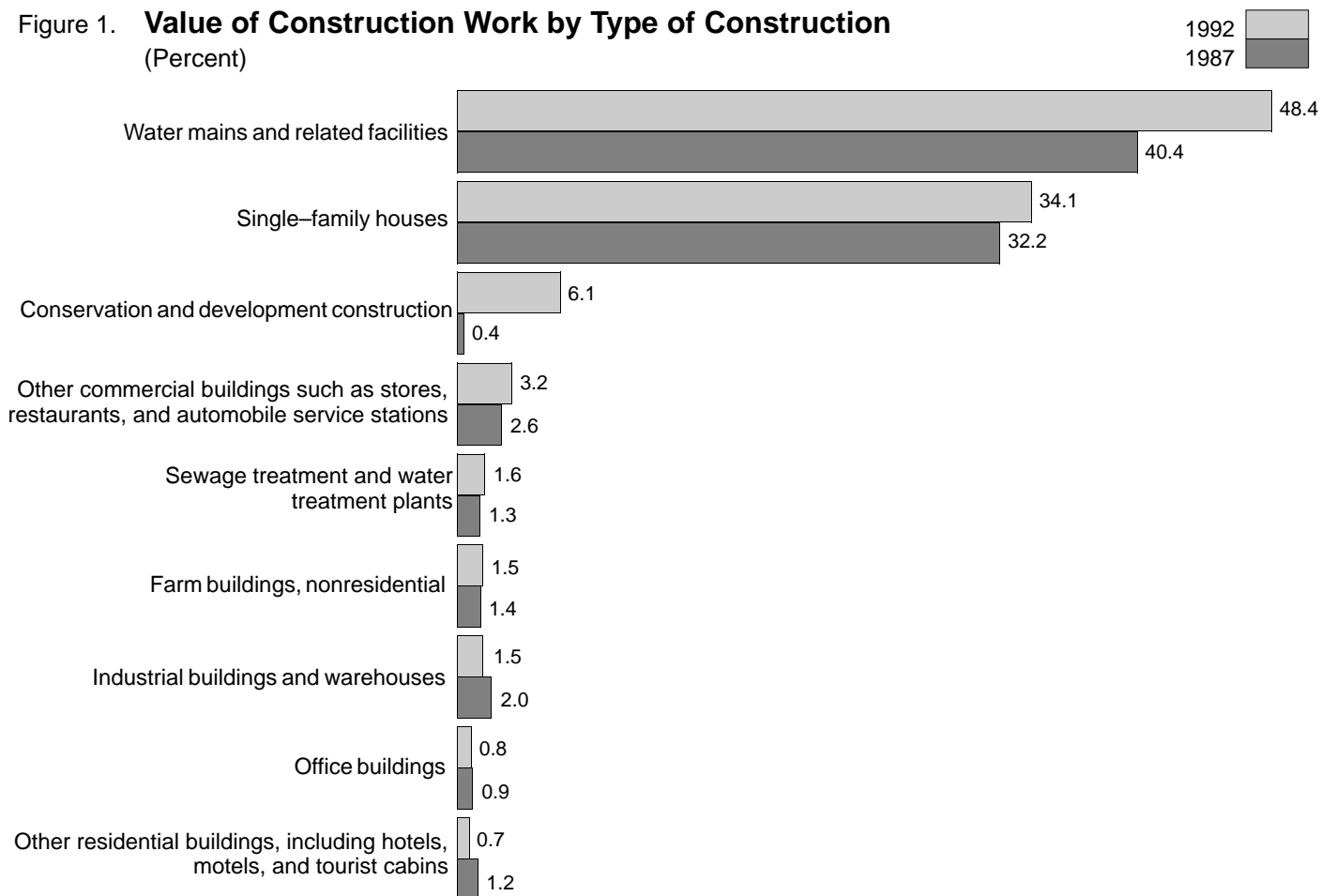


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

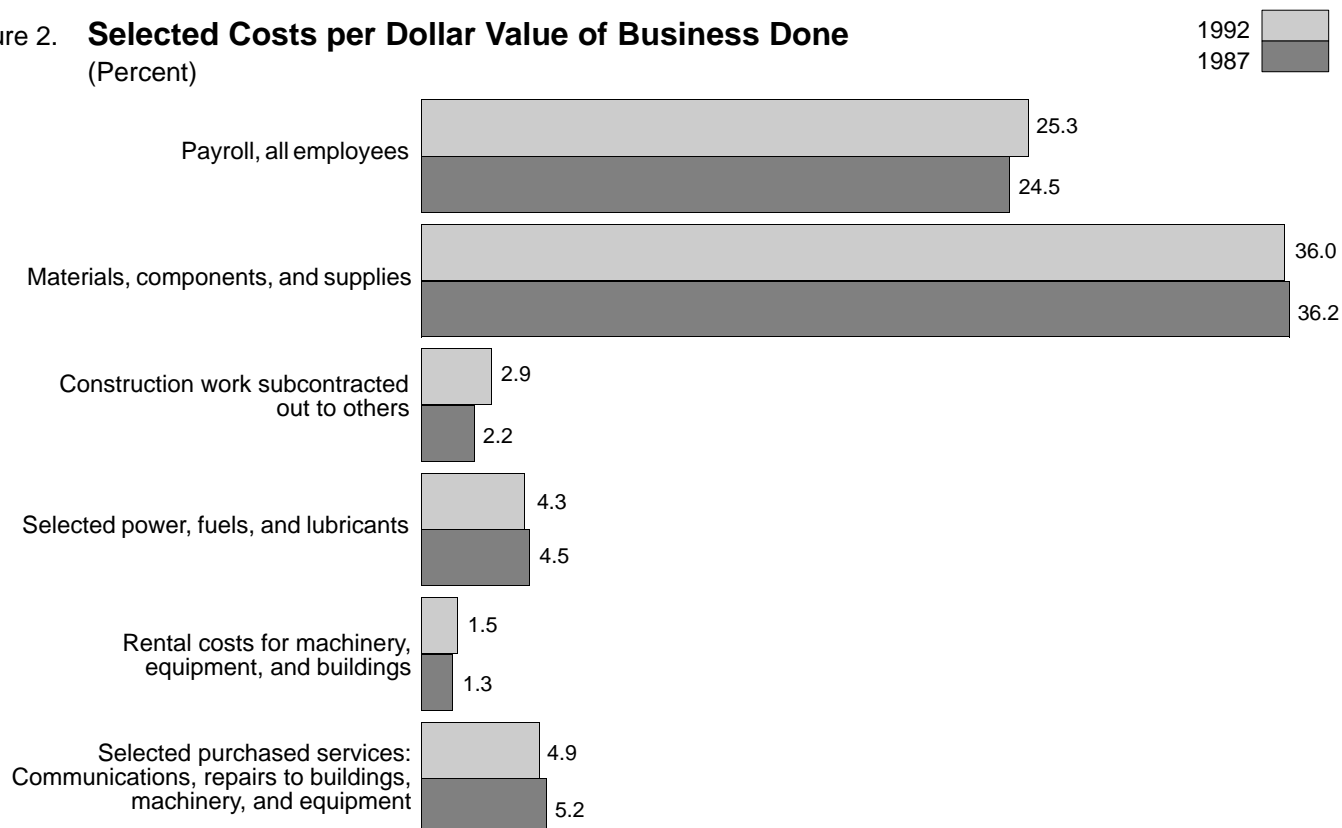


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	3 638	19 346	14 683	443 641	322 593	1 727 355	1 675 998	994 814	705 118
Alabama -----	24	131	96	2 321	1 492	9 200	8 934	5 089	3 844
Alaska -----	15	33	27	(D)	397	(D)	(D)	(D)	1 347
Arizona -----	45	349	288	10 325	8 614	40 362	39 203	25 333	14 804
Arkansas -----	41	314	255	5 642	4 354	22 938	22 428	(D)	12 408
California -----	226	2 446	1 851	73 278	51 169	270 583	256 756	163 608	98 753
Colorado -----	57	289	212	6 262	4 544	24 836	24 482	14 222	10 764
Connecticut -----	41	200	150	5 749	4 531	19 184	18 636	10 028	8 608
Delaware -----	20	79	56	1 727	1 271	6 346	6 065	3 598	2 507
District of Columbia -----	—	—	—	—	—	—	—	—	—
Florida -----	224	1 035	788	21 571	15 551	86 306	83 666	45 558	38 726
Georgia -----	89	401	297	7 014	4 629	30 260	29 861	16 943	12 918
Hawaii -----	7	79	58	(D)	1 851	(D)	(D)	(D)	6 919
Idaho -----	44	202	156	4 533	3 820	20 852	19 928	11 473	8 455
Illinois -----	96	582	409	15 665	10 839	49 335	48 790	30 036	18 839
Indiana -----	105	463	357	11 086	8 516	44 488	43 135	27 326	16 486
Iowa -----	36	183	130	4 122	3 046	15 146	14 416	8 692	6 096
Kansas -----	38	172	130	4 566	3 337	14 431	14 027	8 645	5 519
Kentucky -----	24	77	61	1 033	850	4 211	(D)	2 510	(D)
Louisiana -----	31	111	96	1 493	1 224	6 689	6 653	3 704	2 994
Maine -----	55	213	171	4 071	3 427	18 658	18 429	10 250	8 320
Maryland -----	51	469	375	12 902	10 149	38 547	37 902	25 513	12 418
Massachusetts -----	49	260	187	7 994	5 557	25 825	25 529	15 961	9 568
Michigan -----	268	1 218	932	24 866	18 654	103 098	101 724	60 667	41 153
Minnesota -----	107	612	491	14 062	11 169	56 056	54 424	30 703	24 099
Mississippi -----	33	372	284	7 068	5 139	30 789	29 150	16 424	13 864
Missouri -----	56	310	225	6 616	4 514	25 173	24 782	13 276	11 625
Montana -----	56	149	120	2 494	1 948	13 681	13 374	7 460	(D)
Nebraska -----	100	539	399	11 898	8 642	48 251	47 456	27 750	22 640
Nevada -----	32	214	181	5 105	4 004	22 249	21 836	13 005	(D)
New Hampshire -----	32	139	100	3 506	2 463	12 019	(D)	6 989	4 889
New Jersey -----	75	491	374	15 479	10 726	58 839	52 910	32 482	20 463
New Mexico -----	55	165	138	3 237	2 614	13 417	13 285	7 300	6 193
New York -----	146	599	439	14 309	10 460	51 396	49 839	29 851	20 219
North Carolina -----	127	569	430	10 394	6 960	40 196	39 072	20 944	18 639
North Dakota -----	29	88	63	1 828	1 159	7 186	7 053	3 814	3 418
Ohio -----	105	447	336	11 212	7 991	40 283	39 198	24 884	14 355
Oklahoma -----	41	147	115	1 766	1 239	7 374	7 343	4 554	3 291
Oregon -----	59	259	207	4 605	3 418	18 376	17 771	9 220	8 853
Pennsylvania -----	143	675	501	16 952	12 587	62 376	(D)	37 806	25 236
Rhode Island -----	14	50	33	1 228	886	5 205	5 180	3 538	1 642
South Carolina -----	55	249	184	4 802	3 555	20 185	19 721	12 551	7 262
South Dakota -----	24	87	64	1 545	1 044	5 862	(D)	(D)	3 002
Tennessee -----	46	264	204	4 722	3 316	20 704	20 339	12 124	8 466
Texas -----	266	1 300	973	22 071	16 191	101 275	99 558	56 893	43 456
Utah -----	17	*75	*66	*1 219	*1 063	*5 813	*5 699	*3 540	*2 159
Vermont -----	27	242	213	4 058	3 462	19 461	19 267	11 812	7 455
Virginia -----	103	625	469	14 778	9 512	50 509	(D)	29 097	23 445
Washington -----	100	559	405	11 946	8 626	46 185	44 224	26 025	19 582
West Virginia -----	46	100	88	1 331	1 204	7 648	7 581	4 174	3 407
Wisconsin -----	137	642	446	14 022	9 813	61 952	60 198	33 900	26 554
Wyoming -----	20	74	57	(D)	1 065	(D)	4 959	3 002	(D)

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
51 357	260 302	26 904	69 501	887 158	17 598	1 330 056	779 621	2	2	8	U.S.
266	468	41	206	(S)	146	7 710	4 651	18	20	18	AL
—	(D)	(D)	(D)	1 674	46	4 372	3 142	5	(D)	(D)	AK
1 159	3 183	826	(D)	24 984	312	23 387	12 659	8	3	(D)	AZ
510	1 033	51	677	15 785	237	16 021	6 317	2	4	27	AR
13 827	37 755	6 985	8 012	108 026	1 598	147 661	90 038	3	2	7	CA
354	(D)	294	1 241	15 312	262	16 441	9 099	11	10	5	CO
548	5 046	421	587	11 974	315	30 642	19 203	8	5	2	CT
*281	1 235	96	80	(S)	133	11 483	6 785	29	35	14	DE
—	—	—	—	—	(D)	(D)	(D)	—	—	—	DC
2 640	17 610	893	1 337	24 642	1 229	88 155	53 803	8	7	18	FL
398	1 735	*323	(S)	23 673	384	24 045	12 573	13	17	(S)	GA
*767	1 821	(D)	(D)	8 346	(D)	(D)	(D)	(Z)	(D)	(D)	HI
*924	*2 205	*640	1 095	7 369	*64	2 693	*2 362	10	15	26	ID
545	15 311	798	2 326	27 140	508	44 119	26 919	9	7	13	IL
1 352	4 415	*178	(S)	*19 759	487	31 527	17 858	12	13	(S)	IN
730	691	122	804	8 402	203	14 441	5 733	11	17	30	IA
404	442	146	189	6 429	121	9 573	5 170	20	15	—	KS
(D)	869	126	169	1 448	70	2 825	1 497	(Z)	(D)	(Z)	KY
36	257	27	123	2 167	220	12 837	7 659	10	9	21	LA
229	1 042	*357	*764	*27 220	181	15 591	11 403	29	24	45	ME
645	11 098	950	1 101	19 742	469	36 406	23 545	4	6	11	MD
296	5 934	448	*492	*18 598	378	29 631	18 291	13	12	43	MA
1 374	15 807	1 270	2 764	49 303	778	66 649	34 167	10	7	21	MI
1 632	11 815	830	3 805	29 464	555	47 594	26 077	10	9	24	MN
1 639	1 088	146	861	17 936	389	25 398	12 382	16	9	8	MS
391	1 398	239	1 319	16 203	297	16 457	7 082	10	11	17	MO
(S)	1 279	164	391	7 667	155	8 494	6 194	6	7	18	MT
795	1 333	295	1 311	29 270	335	25 119	11 729	8	8	22	NE
413	2 036	546	834	9 423	71	8 598	5 181	14	17	22	NV
(D)	*3 263	152	217	(S)	179	18 609	12 641	25	(D)	27	NH
5 929	9 744	738	840	19 106	566	49 814	29 011	5	5	14	NJ
132	5 420	123	311	9 527	191	10 787	6 278	12	11	30	NM
1 556	*7 761	1 481	1 108	25 472	897	68 799	42 801	7	8	14	NY
*1 124	4 074	454	793	24 543	803	47 870	29 666	11	11	14	NC
133	264	69	*149	3 786	44	4 254	2 480	8	9	55	ND
1 085	6 139	810	1 688	14 770	387	26 136	14 801	8	6	15	OH
31	1 191	80	303	4 249	115	5 956	3 798	12	10	1	OK
605	3 247	250	1 060	8 720	169	12 179	7 236	20	14	36	OR
(D)	11 987	700	1 835	42 463	848	66 009	43 826	9	(D)	5	PA
25	1 375	17	185	3 651	76	7 709	5 074	4	6	12	RI
*464	5 109	219	1 010	7 788	294	19 316	11 942	17	13	16	SC
(D)	326	*63	128	1 882	26	1 892	1 054	8	(D)	11	SD
365	1 354	250	580	9 986	192	13 241	6 673	9	8	3	TN
1 718	(S)	748	6 292	46 297	1 062	73 803	43 177	11	10	38	TX
(S)	(S)	80	(S)	*4 329	20	930	601	50	49	(S)	UT
194	225	454	204	8 159	57	6 210	4 526	38	38	23	VT
(D)	4 173	509	469	32 473	753	50 279	26 400	7	(D)	32	VA
1 961	3 731	692	4 542	21 553	365	36 127	22 904	12	12	28	WA
67	370	(S)	*385	5 073	152	8 480	4 201	24	22	42	WV
1 754	7 476	852	*4 584	36 110	328	25 829	14 551	15	13	45	WI
(D)	246	55	*188	(S)	74	4 247	2 102	11	9	43	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year -----	3 638	3 414	3 551	4 305	2	2	3	3
Proprietors and working partners -----	1 499	1 150	1 633	2 900	3	7	5	5
All employees** -----	19 346	17 598	17 153	22 352	2	2	3	2
Construction workers:								
March -----	13 863	12 735	13 183	17 296	2	2	2	2
May -----	14 887	14 035	13 974	19 683	2	2	2	2
August -----	15 616	14 357	13 862	19 518	2	2	2	2
November -----	14 364	13 391	12 429	18 276	2	2	3	2
Average -----	14 683	13 628	13 703	18 720	2	2	2	2
Other employees:								
March -----	4 577	3 768	3 448	3 518	2	3	3	2
May -----	4 660	3 993	(NA)	(NA)	2	3	(NA)	(NA)
August -----	4 592	3 983	(NA)	(NA)	2	3	(NA)	(NA)
November -----	4 826	4 129	(NA)	(NA)	2	3	(NA)	(NA)
Average -----	4 664	3 969	(NA)	(NA)	2	3	(NA)	(NA)
Payroll, all employees -----	443 641	335 171	248 983	237 036	1	2	2	1
Payroll, construction workers -----	322 593	248 510	190 161	188 307	2	2	2	1
Payroll, other employees -----	121 048	86 660	58 821	48 730	1	2	2	2
First-quarter payroll, all employees -----	95 425	72 899	60 129	49 963	2	2	2	1
Fringe benefits, all employees -----	100 751	67 655	48 559	40 020	2	2	3	1
Legally required expenditures -----	72 839	50 550	34 246	28 803	2	2	3	2
Voluntary expenditures -----	27 912	17 104	14 313	11 217	3	3	2	2
Dollar value of business done -----	1 751 290	1 368 347	1 031 674	1 118 330	2	2	2	2
Value of construction work -----	1 727 355	1 330 056	1 013 886	1 090 418	2	2	2	2
Value of construction work subcontracted in from others -----	260 302	213 779	116 796	126 042	7	6	5	4
Other business receipts -----	23 935	38 291	17 788	27 912	8	9	8	12
Net value of construction work† -----	1 675 998	1 299 288	984 884	1 077 767	2	2	2	2
Value added†† -----	994 814	779 621	577 507	628 789	2	2	2	2
Selected costs -----	756 476	588 726	454 167	489 541	2	2	2	2
Materials, components, and supplies -----	630 468	495 741	374 019	435 442	2	2	2	2
Construction work subcontracted out to others -----	51 357	30 768	29 001	12 651	3	5	3	4
Selected power, fuels, and lubricants -----	74 651	62 217	51 145	41 449	2	2	3	2
Electricity -----	6 932	5 169	3 430	3 481	3	3	5	2
Natural and manufactured gas -----	1 543	883	827	890	5	8	9	9
Gasoline and diesel fuel -----	60 357	51 794	43 361	33 113	2	2	3	2
On highway use -----	40 252	37 230	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use -----	20 106	14 564	(NA)	(NA)	3	5	(NA)	(NA)
Other, including lubricating oils and greases -----	5 819	4 369	3 526	3 965	4	7	6	4
Rental cost for machinery, equipment, and buildings -----	26 904	17 527	10 758	10 962	4	5	5	5
For machinery and equipment -----	14 971	9 767	6 262	8 173	5	8	5	7
For buildings -----	11 933	7 759	4 496	2 789	5	5	6	4
Selected purchased services -----	86 625	71 366	50 284	49 788	3	3	3	2
Communication services -----	18 899	15 363	9 294	7 309	3	3	3	3
Repairs to buildings and other structures -----	3 495	3 727	2 505	2 110	7	10	8	7
Repairs to machinery and equipment -----	64 231	52 275	38 483	40 369	4	3	3	2
Ownership of construction projects:								
Value of construction work -----	1 727 355	1 330 056	1 013 886	1 090 418	2	2	2	2
Government owned -----	225 893	207 653	177 264	176 967	3	4	8	3
Federal -----	61 635	50 606	(NA)	(NA)	8	13	(NA)	(NA)
State and local -----	164 259	157 047	(NA)	(NA)	3	3	(NA)	(NA)
Privately owned -----	1 501 462	1 122 402	836 621	913 451	3	3	3	2

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	847 565	601 127	4	4
Capital expenditures, other than land -----	69 501	61 724	8	5
New -----	49 947	43 707	8	6
Used -----	19 553	18 017	16	8
Retirements and disposition of depreciable assets -----	29 908	25 541	11	7
End-of-year gross book value of depreciable assets -----	887 158	637 309	4	4
Depreciation charges during year -----	87 954	68 796	4	4
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	80 135	78 674	7	11
Capital expenditures, other than land -----	5 941	8 577	15	10
New buildings and other structures -----	4 146	5 030	13	14
Used buildings and other structures -----	1 795	3 547	38	15
Retirements and disposition of depreciable assets -----	1 183	2 255	22	28
End-of-year gross book value of depreciable assets -----	84 894	84 996	7	10
Depreciation charges during year -----	6 337	5 387	11	7
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	767 430	522 452	4	4
Capital expenditures, other than land -----	63 559	53 147	9	5
New machinery and equipment, including automobiles and trucks -----	45 801	38 676	9	7
New automobiles and trucks, intended primarily for highway use -----	13 883	20 647	7	8
Used machinery and equipment, including automobiles and trucks -----	17 758	14 470	17	8
Retirements and disposition of depreciable assets -----	28 725	23 286	11	7
End-of-year gross book value of depreciable assets -----	802 264	552 313	4	4
Depreciation charges during year -----	81 617	63 409	4	5

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	3 638	2
Value of construction work	1 727 355	2
Establishments with inventories:		
Number	1 852	3
Value of construction work	1 117 935	2
Inventories ¹ :		
End of 1992, materials and supplies	54 350	4
End of 1991, materials and supplies	42 409	4
Establishments with no inventories:		
Number	783	5
Value of construction work	269 696	5
Establishments not reporting:		
Number	1 003	4
Value of construction work	339 724	4

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	3 638	2 375	808	314	116	21	5	—	—	—
All employees** -----	19 346	4 673	5 199	4 148	3 392	1 303	630	—	—	—
Payroll, all employees -----	443 641	77 570	101 556	102 138	103 301	39 234	19 842	—	—	—
Dollar value of business done -----	1 751 290	429 821	409 760	352 295	348 051	140 464	70 899	—	—	—
Value of construction work -----	1 727 355	427 098	404 662	345 314	343 719	138 108	68 455	—	—	—
Net value of construction work† -----	1 675 998	419 318	397 140	335 231	332 446	<u>191 863</u>	(D)	—	—	—
Value added†† -----	994 814	231 159	229 879	205 234	204 046	79 946	44 550	—	—	—
Cost of materials, components, supplies, and fuels -----	705 118	190 882	172 359	136 978	132 732	72 167	(D)	—	—	—
Cost of construction work subcontracted out to others --	51 357	7 780	7 522	10 083	11 273	<u>14 700</u>	(D)	—	—	—
Rental cost for machinery, equipment, and buildings -----	26 904	6 003	5 160	4 760	5 354	<u>5 626</u>	(D)	—	—	—
Capital expenditures, other than land -----	69 501	12 136	25 433	11 158	13 018	<u>7 756</u>	(D)	—	—	—
End-of-year gross book value of depreciable assets -----	887 158	200 096	247 465	200 491	155 269	51 677	32 159	—	—	—
1987										
All employees** -----	17 598	4 478	4 776	3 916	3 548	878	—	—	—	—
Value of construction work -----	1 330 056	342 721	331 610	283 242	299 910	72 572	—	—	—	—
Value added†† -----	779 621	195 495	198 215	177 635	168 247	40 027	—	—	—	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	2	4	6	6	2	(Z)	(Z)	—	—	—
Net value of construction work† -----	2	5	6	4	1	(Z)	(D)	—	—	—
Capital expenditures, other than land -----	8	9	21	14	2	(Z)	(D)	—	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	3 638	(S)	136	467	1 168	945	489	254	54	30	6
All employees** -----	19 346	(S)	139	661	2 614	4 179	3 711	4 093	1 721	1 551	632
Payroll, all employees -----	443 641	(S)	972	6 736	36 993	76 212	81 865	108 104	53 634	56 633	22 122
Dollar value of business done -----	1 751 290	(S)	5 264	34 471	196 795	332 567	334 516	366 257	186 302	200 259	93 797
Value of construction work -----	1 727 355	(S)	5 264	33 992	195 548	328 309	330 497	359 808	183 343	195 750	93 797
Net value of construction work† -----	1 675 998	(S)	5 208	33 257	191 623	322 051	325 772	350 323	178 533	268 191	(D)
Value added†† -----	994 814	(S)	2 911	17 727	101 299	180 723	196 384	212 984	114 121	113 678	54 500
Cost of materials, components, supplies, and fuels -----	705 118	(S)	2 297	16 008	91 570	145 586	133 407	143 788	67 371	104 522	(D)
Cost of construction work subcontracted out to others -----	51 357	(S)	56	(S)	3 926	6 258	4 724	9 485	4 810	21 356	(D)
Rental cost for machinery, equipment, and buildings -----	26 904	(S)	(S)	(S)	3 197	4 160	3 995	5 584	2 397	3 520	3 631
Capital expenditures, other than land -----	69 501	(S)	(S)	950	4 756	12 971	21 342	12 445	8 079	4 641	3 932
End-of-year gross book value of depreciable assets -----	887 158	(S)	(S)	22 022	92 050	192 967	201 352	188 456	82 187	68 326	37 397
1987											
All employees** -----	17 598	(S)	(S)	750	3 309	3 805	3 092	3 517	2 283	603	(D)
Value of construction work -----	1 330 056	(S)	(S)	33 902	197 976	284 210	236 302	296 355	274 335	(D)	(D)
Value added†† -----	779 621	(S)	(S)	19 274	114 506	165 846	140 029	184 037	111 962	40 051	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	(S)	19	11	6	7	7	4	(Z)	(Z)	(Z)
Net value of construction work† -----	2	(S)	16	9	6	6	7	4	(Z)	(Z)	(D)
Capital expenditures, other than land -----	8	(S)	(S)	31	16	19	24	6	(Z)	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 727 355	1 205 815	135 992	384 073	2	2	5	2
Building construction	734 707	509 970	64 805	159 932	3	3	7	5
Single-family houses	588 506	414 686	51 859	121 960	3	4	8	6
Single-family houses, detached	578 452	407 618	50 811	120 024	3	4	9	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	10 053	7 069	1 049	1 936	21	27	28	21
Other residential buildings, including hotels, motels, and tourist cabins	11 853	5 654	132	(S)	9	7	14	(S)
Office buildings	13 377	10 416	(D)	(D)	7	8	(D)	(D)
Other commercial buildings such as stores, restaurants, and automobile service stations	54 816	37 120	4 150	13 547	5	5	16	10
Industrial buildings and warehouses	26 559	17 155	3 825	5 580	7	5	28	9
Farm buildings, nonresidential	25 971	15 612	2 188	8 170	11	12	22	18
Other nonresidential buildings	13 625	9 327	(D)	(D)	9	11	(D)	(D)
Nonbuilding construction	991 173	695 845	71 187	224 142	2	3	6	2
Conservation and development construction	106 027	75 051	9 968	21 008	7	9	9	8
Sewers, water mains, and related facilities	845 007	600 221	54 888	189 798	2	3	7	3
Sewers, sewer lines, septic systems, and related facilities	8 339	5 724	*661	1 954	22	26	45	16
Water mains and related facilities	836 668	594 498	54 327	187 843	2	3	7	3
Sewage treatment and water treatment plants	28 303	14 173	2 312	11 817	7	9	1	5
Other nonbuilding construction	11 836	6 399	3 918	1 519	7	9	4	26
Construction work, n.s.k.	1 475	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
1987								
Value of construction work	1 330 056	835 156	97 644	239 010	2	2	6	3
Building construction	561 220	403 350	56 946	100 924	3	4	8	5
Single-family houses	428 005	313 752	41 538	72 715	4	4	9	5
Single-family houses, detached	411 246	303 345	39 212	68 688	4	4	9	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	16 759	10 406	*2 325	4 027	17	16	42	23
Other residential buildings, including hotels, motels, and tourist cabins	15 956	9 584	1 611	*4 760	24	23	32	47
Office buildings	11 425	8 163	1 846	1 415	15	17	20	18
Other commercial buildings such as stores, restaurants, and automobile service stations	34 028	23 920	6 359	3 749	5	6	5	21
Industrial buildings and warehouses	26 704	18 283	1 641	6 779	9	10	20	10
Farm buildings, nonresidential	18 561	12 126	2 058	4 376	16	20	34	19
Other nonresidential buildings	26 541	17 519	1 889	7 128	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	610 591	431 806	40 698	138 086	3	3	9	5
Conservation and development construction	5 298	4 383	—	915	33	33	—	33
Water mains and related facilities	536 710	381 537	34 331	120 840	3	4	8	5
Sewage treatment and water treatment plants	17 600	11 085	2 659	3 855	10	13	19	3
Other nonbuilding construction	50 983	34 801	3 708	12 476	12	12	74	2
Construction work, n.s.k.	158 244	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work subcontracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
				D	E						
All establishments -----	3 638	19 346	443 641	1 727 355	1 544 925	1 675 998	994 814	51 357	2	2	3
Establishments not specializing by type -----	142	979	24 913	92 162	(NA)	89 286	53 979	2 875	10	7	2
Establishments specializing 51 percent or more -----	3 496	18 367	418 727	1 635 194	1 544 925	1 586 712	940 836	48 482	2	2	3
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	1 775	7 386	148 886	607 809	547 344	597 822	345 067	9 986	4	4	10
Establishments with —											
100 percent specialization -----	929	3 345	62 997	264 673	264 673	260 849	144 686	3 824	6	6	12
90 to 99 percent specialization -----	429	1 849	40 517	151 593	142 101	148 820	88 032	2 773	9	8	19
80 to 89 percent specialization -----	136	773	15 585	71 365	59 379	70 820	42 231	545	10	11	18
70 to 79 percent specialization -----	149	704	15 244	62 952	46 189	62 319	39 416	633	13	13	24
60 to 69 percent specialization -----	109	634	12 792	49 439	30 751	47 307	26 067	2 133	17	16	31
51 to 59 percent specialization -----	*23	80	1 751	7 787	4 251	7 708	4 634	79	29	29	2
WATER MAINS AND RELATED FACILITIES											
All establishments specializing in type -----	1 423	8 791	218 394	826 817	816 922	802 645	483 524	24 172	3	2	4
Establishments with —											
100 percent specialization -----	1 366	8 274	205 620	784 677	784 677	761 332	458 892	23 345	3	2	4
90 to 99 percent specialization -----	15	142	3 267	11 180	10 356	11 078	6 417	*102	33	34	45
80 to 89 percent specialization -----	*20	129	2 947	9 347	7 779	8 865	4 897	482	36	23	25
70 to 79 percent specialization -----	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
60 to 69 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
51 to 59 percent specialization -----	*16	*124	*2 283	*8 778	*4 886	*8 713	*4 191	*65	62	56	58

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	3 638	14 683	13 863	14 887	15 616	14 364	2	2	2	2	2	2
Alabama	24	96	96	95	100	94	8	14	15	13	14	14
Alaska	15	27	21	23	31	(Z)	(Z)	6	(Z)	(Z)	5	10
Arizona	45	288	277	309	302	263	10	8	8	8	8	9
Arkansas	41	255	227	267	281	246	11	3	3	3	3	3
California	226	1 851	1 834	1 857	1 941	1 773	6	3	3	3	3	3
Colorado	57	212	203	206	233	207	10	9	10	9	9	9
Connecticut	41	150	128	161	163	146	18	11	2	10	10	7
Delaware	20	56	50	65	59	51	37	28	31	35	26	31
District of Columbia	—	—	—	—	—	—	—	—	—	—	—	—
Florida	224	788	758	799	804	790	8	7	7	7	8	7
Georgia	89	297	296	293	312	285	9	13	12	13	12	14
Hawaii	7	58	55	64	60	51	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Idaho	44	156	141	170	166	147	18	13	15	12	14	14
Illinois	96	409	387	403	430	416	10	8	9	9	9	8
Indiana	105	357	338	345	384	360	8	13	15	14	13	13
Iowa	36	130	133	133	132	121	16	12	11	11	11	11
Kansas	38	130	119	155	128	120	18	19	20	18	18	19
Kentucky	24	61	57	62	63	60	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Louisiana	31	96	99	101	94	90	8	9	8	8	8	9
Maine	55	171	153	173	178	180	20	28	28	28	27	27
Maryland	51	375	357	391	403	348	7	4	5	4	4	5
Massachusetts	49	187	179	179	203	187	16	14	13	15	15	15
Michigan	268	932	733	1 001	1 020	974	8	10	10	10	10	10
Minnesota	107	491	449	478	537	501	8	12	13	12	13	12
Mississippi	33	284	273	288	287	288	23	20	15	18	18	25
Missouri	56	225	211	224	241	223	9	7	6	6	6	9
Montana	56	120	103	121	141	113	3	7	8	7	8	7
Nebraska	100	399	401	414	427	352	6	9	9	9	8	9
Nevada	32	181	195	198	188	142	27	15	14	14	14	19
New Hampshire	32	100	83	96	117	106	13	25	24	25	24	26
New Jersey	75	374	362	374	382	377	14	6	5	6	6	5
New Mexico	55	138	121	132	161	139	21	12	11	10	10	11
New York	146	439	417	419	464	457	2	7	7	7	8	10
North Carolina	127	430	416	436	443	427	12	11	12	11	11	12
North Dakota	29	63	45	71	75	60	(Z)	8	14	5	9	7
Ohio	105	336	319	328	360	339	11	9	9	8	9	9
Oklahoma	41	115	99	113	118	129	8	9	11	9	9	7
Oregon	59	207	198	192	262	178	9	18	13	19	25	17
Pennsylvania	143	501	480	499	520	505	8	9	9	9	9	9
Rhode Island	14	33	25	33	38	34	(Z)	4	5	4	3	4
South Carolina	55	184	186	187	187	174	17	18	18	18	18	19
South Dakota	24	64	60	69	71	56	6	7	7	8	8	6
Tennessee	46	204	201	200	213	201	12	11	12	10	9	10
Texas	266	973	954	991	1 017	929	9	11	12	11	10	10
Utah	17	*66	*57	*63	*74	*70	19	52	49	44	55	58
Vermont	27	213	196	211	226	221	31	41	43	43	40	38
Virginia	103	469	462	498	486	429	15	8	8	7	8	8
Washington	100	405	407	405	447	360	13	11	11	9	10	11
West Virginia	46	88	79	83	94	94	16	27	29	28	25	25
Wisconsin	137	446	371	454	492	467	14	14	15	14	14	15
Wyoming	20	57	53	61	62	53	11	12	12	14	10	12

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	1 727 355	3 628	1 583 426	715	143 929	1 330 056	29.9	2	2	2
Alabama -----	15 453	24	8 241	25	7 212	11 310	36.6	11	21	3
Alaska -----	2 487	14	2 487	—	—	4 360	−43.0	11	11	—
Arizona -----	21 183	44	19 911	6	1 272	17 064	24.1	5	6	(Z)
Arkansas -----	25 608	41	22 587	14	*3 021	13 665	87.4	8	4	62
California -----	262 191	226	255 769	11	6 423	148 313	76.8	2	2	(Z)
Colorado -----	26 367	57	(D)	9	(D)	15 609	68.9	9	(D)	(D)
Connecticut -----	18 806	41	16 848	11	1 958	31 220	−39.8	6	7	5
Delaware -----	7 477	20	*5 643	13	1 834	9 222	−18.9	31	40	31
District of Columbia -----	(D)	—	—	1	(D)	(D)	(D)	(D)	—	(D)
Florida -----	82 160	224	81 598	*14	562	87 884	−6.5	7	7	8
Georgia -----	31 541	89	28 685	10	2 857	23 474	34.4	16	18	(Z)
Hawaii -----	16 551	(S)	(D)	3	(D)	(D)	(D)	(Z)	(D)	(D)
Idaho -----	25 892	44	(D)	9	(D)	3 774	586.1	13	(D)	(D)
Illinois -----	53 195	96	47 511	29	5 684	48 997	8.6	6	7	3
Indiana -----	41 694	105	39 008	22	2 686	28 018	48.8	12	13	3
Iowa -----	19 562	36	(D)	13	(D)	12 730	53.7	12	(D)	(D)
Kansas -----	10 010	38	9 727	*12	*283	6 964	43.7	21	21	44
Kentucky -----	6 805	24	3 948	13	2 857	3 299	106.3	1	(Z)	2
Louisiana -----	12 215	31	6 460	*19	5 755	16 023	−23.8	13	10	26
Maine -----	20 087	55	18 630	14	1 457	16 952	18.5	22	23	22
Maryland -----	33 496	51	32 167	18	1 329	41 914	−20.1	6	6	24
Massachusetts -----	27 891	49	21 554	34	6 337	30 506	−8.6	11	14	8
Michigan -----	107 636	267	102 378	17	5 258	68 693	56.7	7	7	7
Minnesota -----	54 980	107	(D)	*6	(D)	48 620	13.1	9	(D)	(D)
Mississippi -----	27 445	33	(D)	13	(D)	21 633	26.9	10	(D)	(D)
Missouri -----	19 427	56	18 701	21	726	18 570	4.6	6	6	18
Montana -----	14 124	56	(D)	*4	(D)	8 180	72.7	7	(D)	(D)
Nebraska -----	46 479	100	(D)	5	(D)	24 277	91.5	8	(D)	(D)
Nevada -----	34 000	32	(D)	9	(D)	12 292	176.6	11	(D)	(D)
New Hampshire -----	12 532	32	9 780	15	2 752	19 742	−36.5	18	23	19
New Jersey -----	53 837	75	51 937	13	1 900	48 567	10.9	5	5	1
New Mexico -----	16 113	55	9 804	15	6 309	13 362	20.6	9	15	1
New York -----	55 902	146	50 356	30	5 546	70 927	−21.2	7	8	15
North Carolina -----	43 792	121	39 112	*16	4 680	47 260	−7.3	11	12	15
North Dakota -----	6 424	29	6 184	*3	*240	2 894	122.0	10	10	67
Ohio -----	40 155	105	35 503	18	4 652	26 730	50.2	7	7	34
Oklahoma -----	9 036	41	7 374	*17	1 662	6 352	42.3	10	9	37
Oregon -----	18 050	59	16 819	*15	1 231	20 069	−10.1	14	15	26
Pennsylvania -----	61 601	143	57 807	32	3 793	60 629	1.6	8	8	4
Rhode Island -----	(D)	14	(D)	5	(D)	4 907	(D)	(D)	(D)	(D)
South Carolina -----	17 095	54	15 835	17	1 260	19 371	−11.8	15	17	10
South Dakota -----	7 102	24	5 852	21	1 250	1 885	276.8	9	9	30
Tennessee -----	16 729	46	16 470	*12	260	14 125	18.4	9	10	30
Texas -----	98 158	266	97 632	*20	526	72 704	35.0	10	10	11
Utah -----	11 246	17	*5 690	6	5 556	1 521	639.4	25	49	(Z)
Vermont -----	18 680	27	*18 083	6	597	6 030	209.8	39	40	(Z)
Virginia -----	51 957	103	49 297	22	2 660	50 789	2.3	6	7	18
Washington -----	46 504	100	44 715	13	1 789	27 584	68.6	12	13	3
West Virginia -----	8 788	46	7 178	22	1 610	7 260	21.1	19	23	12
Wisconsin -----	60 427	137	56 807	18	3 620	25 904	133.3	13	14	14
Wyoming -----	5 423	(S)	(D)	6	(D)	4 296	26.2	8	(D)	(D)

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business -----	1 751 290	1 368 347	2	2
SPECIAL TRADE CONTRACTORS				
Millwright -----	9 569	11 063	16	16
Plumbing contractor -----	16 311	20 729	11	10
Septic system installation contractor -----	9 995	(NA)	28	(NA)
Water well drilling contractor -----	1 659 694	1 216 053	2	2
Other construction activities -----	32 284	43 650	9	(NA)
OTHER BUSINESS ACTIVITIES				
Retail trade -----	12 412	17 677	12	13
Other business activities -----	10 302	24 498	11	(NA)
Kind of business activity, n.s.k. -----	724	34 677	(Z)	12

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	5.3	5.2	1
Number of construction workers	4.0	4.0	1
Number of all other employees	1.3	1.2	2
Payroll, all employees \$1,000 ..	121.9	98.2	1
Payroll, construction workers do ..	88.7	72.8	1
Payroll, other employees do ..	33.3	25.4	2
Dollar value of business done do ..	481.4	400.8	1
Value of construction work do ..	474.8	389.6	1
Cost of materials, components, supplies, and fuels do ..	193.8	163.4	1
Construction work subcontracted to others do ..	14.1	9.0	3
Rental cost for machinery, equipment, and buildings do ..	7.4	5.1	4
Capital expenditures, other than land do ..	19.1	18.1	9
Gross book value of depreciable assets do ..	243.8	186.7	4
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	22.9	19.0	1
Dollar value of business done do ..	90.5	77.8	1
Value added†† do ..	51.4	44.3	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	22.0	18.2	1
Value of construction work do ..	117.6	97.6	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	26.0	21.8	2
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.257	.252	1
Cost of materials, components, supplies, and fuels do ..	.408	.419	1
Cost of construction work subcontracted out to others do ..	.030	.023	3
Value of construction work subcontracted in from others do ..	.151	.161	7
Rental cost for machinery, equipment, and buildings do ..	.016	.013	4

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States	5.3	22.9	117.6	.257	.408	.030	.151	.016
Alabama	5.5	17.7	95.8	.252	.418	.029	.051	.004
Alaska	2.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Arizona	7.8	29.6	140.1	.256	.367	.029	.079	.020
Arkansas	7.7	18.0	90.0	.246	.541	.022	.045	.002
California	10.8	30.0	146.2	.271	.365	.051	.140	.026
Colorado	5.1	21.7	117.2	.252	.433	.014	(D)	.012
Connecticut	4.9	28.7	127.9	.300	.449	.029	.263	.022
Delaware	4.0	21.9	113.3	.272	.395	.044	*.195	*.015
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.6	20.8	109.5	.250	.449	.031	.204	.010
Georgia	4.5	17.5	101.9	.232	.427	.013	.057	.011
Hawaii	11.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Idaho	4.6	22.4	133.7	.217	.405	.044	.106	*.031
Illinois	6.1	26.9	120.6	.318	.382	.011	.310	.016
Indiana	4.4	23.9	124.6	.249	.371	.030	*.099	*.004
Iowa	5.1	22.5	116.5	.272	.402	.048	.046	.008
Kansas	4.6	26.5	111.0	.316	.382	.028	.031	.010
Kentucky	3.2	13.4	69.0	.245	(D)	(D)	.206	.030
Louisiana	3.6	13.5	69.7	.223	.448	.005	.038	.004
Maine	3.9	19.1	109.1	.218	.446	.012	.056	*.019
Maryland	9.2	27.5	102.8	.335	.322	.017	.288	.025
Massachusetts	5.3	30.7	138.1	.310	.370	.011	.230	.017
Michigan	4.5	20.4	110.6	.241	.399	.013	.153	.012
Minnesota	5.7	23.0	114.2	.251	.430	.029	.211	.015
Mississippi	11.2	19.0	108.4	.230	.450	.053	.035	.005
Missouri	5.5	21.3	111.9	.263	.462	.016	.056	.009
Montana	2.7	16.7	114.0	.182	(D)	(S)	.094	.012
Nebraska	5.4	22.1	120.9	.247	.469	.016	.028	.006
Nevada	6.7	23.9	122.9	.229	(D)	.019	.092	.025
New Hampshire	4.4	25.2	120.2	.292	.407	(D)	*.272	.013
New Jersey	6.6	31.5	157.3	.263	.348	.101	.166	.013
New Mexico	3.0	19.6	97.2	.241	.462	.010	.404	.009
New York	4.1	23.9	117.1	.278	.393	.030	*.151	.029
North Carolina	4.5	18.3	93.5	.259	.464	.028	.101	.011
North Dakota	3.0	20.8	114.1	.254	.476	.019	.037	.010
Ohio	4.2	25.1	119.9	.278	.356	.027	.152	.020
Oklahoma	3.6	12.0	64.1	.239	.446	.004	.161	.011
Oregon	4.4	17.8	88.8	.251	.482	.033	.177	.014
Pennsylvania	4.7	25.1	124.5	.272	.405	(D)	.192	.011
Rhode Island	3.6	24.6	157.7	.236	.315	.005	.264	.003
South Carolina	4.5	19.3	109.7	.238	.360	*.023	.253	.011
South Dakota	3.6	17.8	91.6	.264	.512	(D)	.056	*.011
Tennessee	5.7	17.9	101.5	.228	.409	.018	.065	.012
Texas	4.9	17.0	104.1	.218	.429	.017	(S)	.007
Utah	4.5	16.2	88.1	.210	.371	(S)	1.194	.014
Vermont	8.9	16.8	91.4	.209	.383	.010	.012	.023
Virginia	6.1	23.6	107.7	.293	.464	(D)	.083	.010
Washington	5.6	21.4	114.0	.259	.424	.042	.081	.015
West Virginia	2.2	13.3	86.9	.174	.445	.009	.048	*.029
Wisconsin	4.7	21.8	138.9	.226	.429	.028	.121	.014
Wyoming	3.7	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Appendix A.

Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

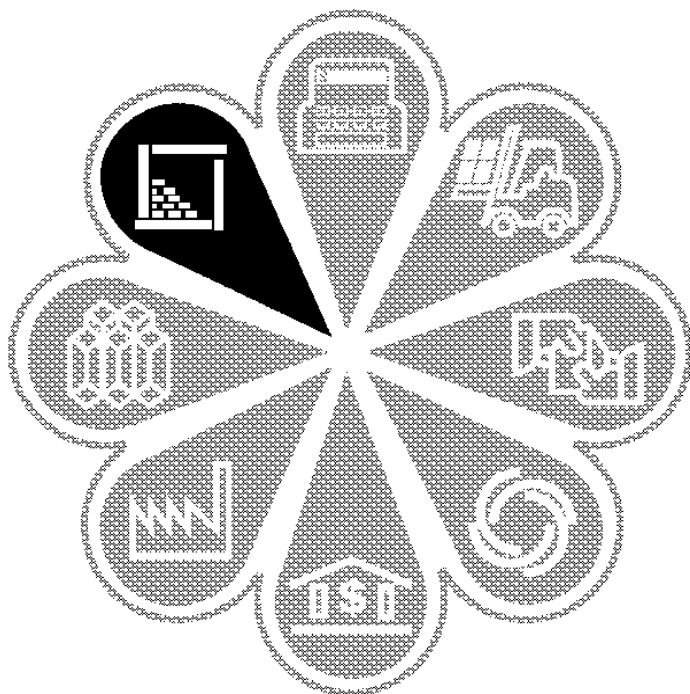
Census of Construction Industries

CC92-I-21

INDUSTRY SERIES

Structural Steel Erection Special Trade Contractors

Industry 1791



1992 Census of Construction Industries

CC92-I-21

INDUSTRY SERIES

Structural Steel Erection Special Trade Contractors

Industry 1791

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BUREAU OF THE CENSUS
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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year— buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment.	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number.	2					
Other employees—quarterly.	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners.	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total.	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added.	1, 2, 8	1	5	6		8
Rental costs:						
Total.	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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Summary of Findings

Establishments classified in this industry are primarily engaged in the erection of structural steel; the placement of concrete reinforcement and structural iron work; the installation of curtain wall and precast concrete; and the erection of metal storage tanks. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$5.1 billion in total dollar value of business. Of this amount, \$5.0 billion were for the value of construction work. These establishments paid out \$1.5 billion for materials, components, and supplies and \$465 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$75.5 million. Value added for 1992 was \$3.0 billion.

There were 3,792 establishments with total employment averaging 57,986 during the year. Total payroll for 1992 was \$1.6 billion.

Larger establishments with 20 employees or more, while representing only 20 percent of the total number of

employer establishments in this industry, accounted for 71 percent of all business done.

A “construction establishment” is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

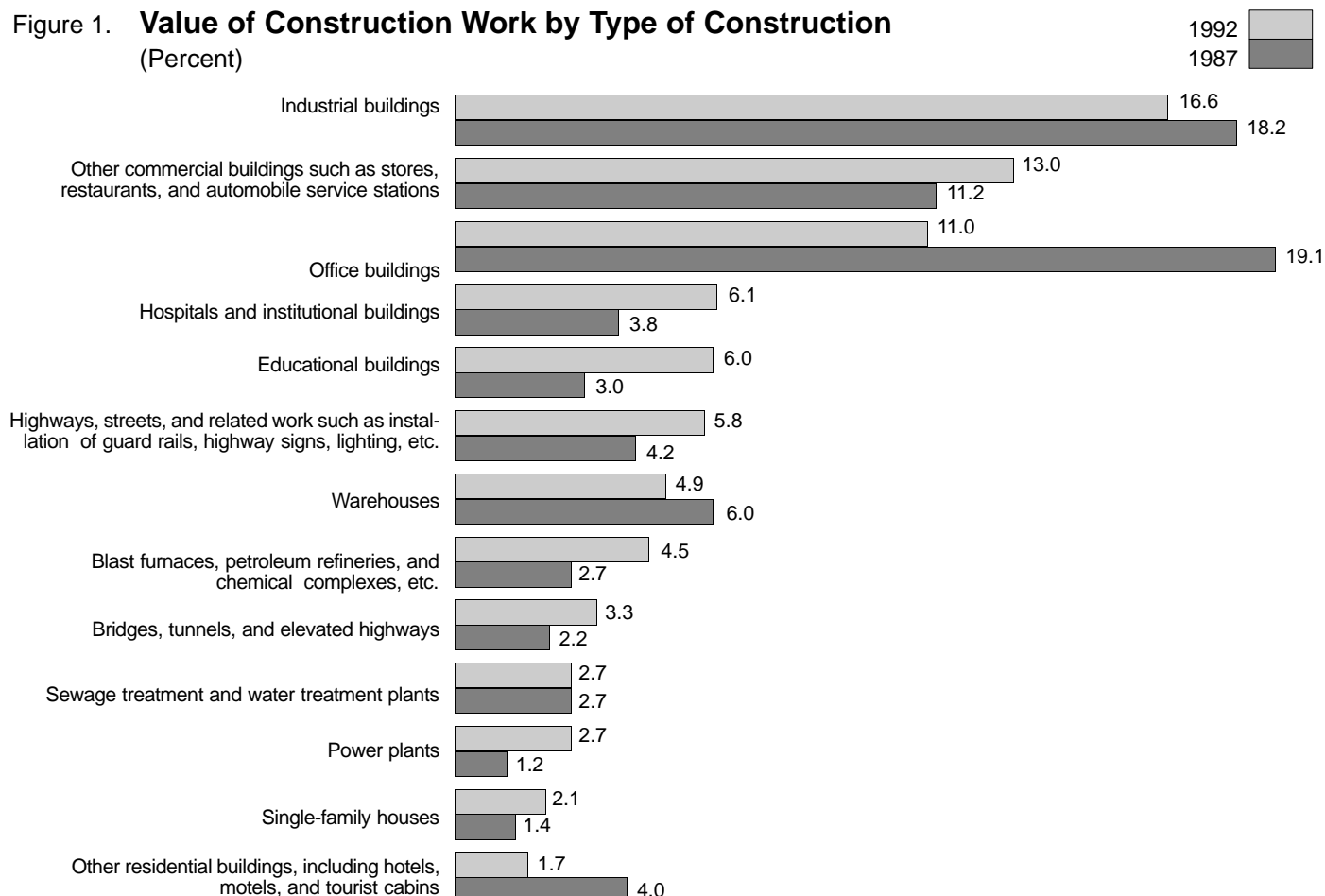


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

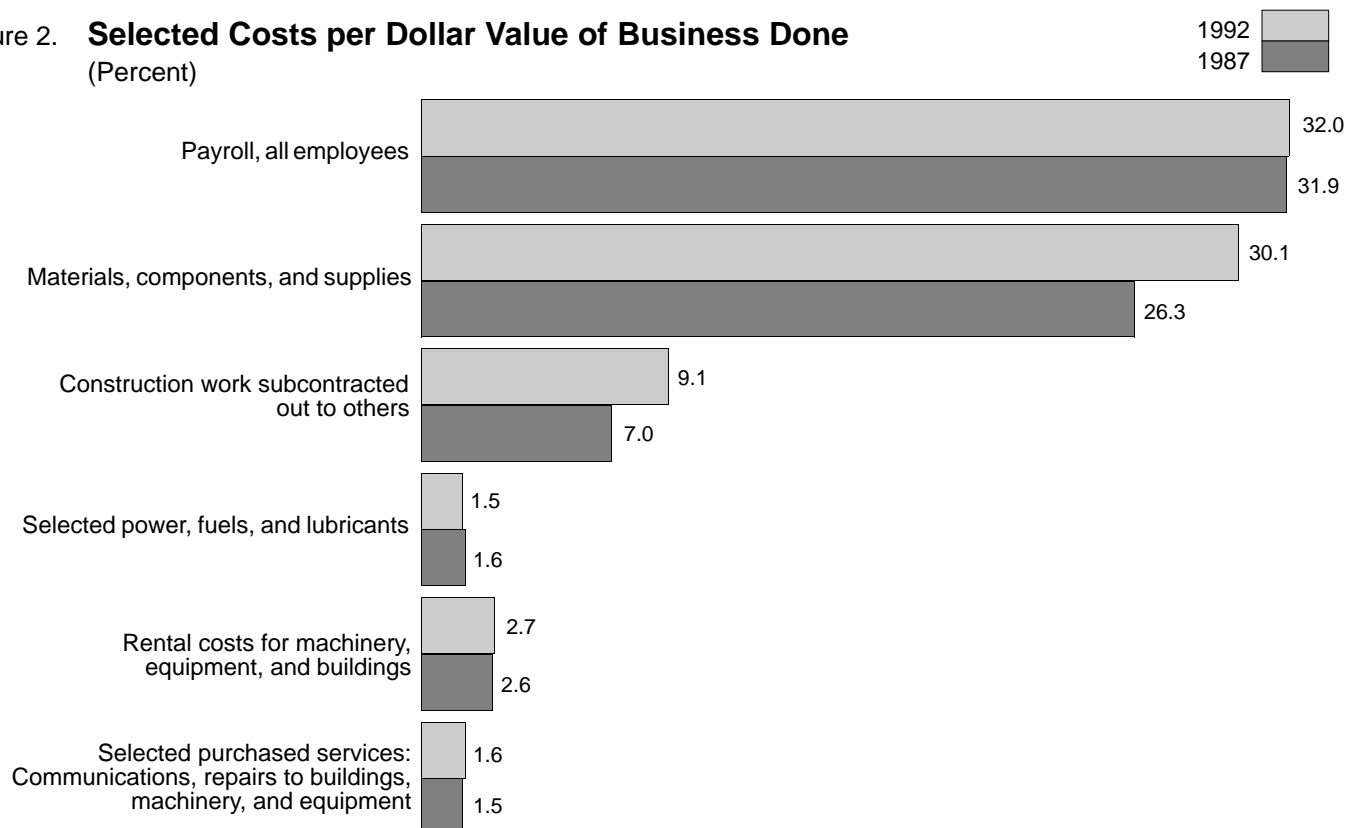


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	3 792	57 986	47 138	1 628 902	1 226 900	4 952 038	4 486 702	3 020 993	1 608 375
Alabama -----	44	873	745	20 437	16 239	43 277	40 921	37 974	(D)
Alaska -----	12	119	83	7 829	5 101	26 158	(D)	(D)	8 310
Arizona -----	77	1 357	1 081	29 709	19 813	108 683	96 420	48 331	51 171
Arkansas -----	30	397	323	7 846	5 524	30 577	29 350	19 230	10 121
California -----	468	7 611	5 937	235 707	170 704	761 286	713 583	421 506	302 543
Colorado -----	69	1 302	1 087	36 505	28 147	112 709	97 203	67 538	31 888
Connecticut -----	53	549	408	17 171	11 642	61 061	51 962	(D)	28 686
Delaware -----	14	227	167	7 539	5 164	24 392	18 049	10 796	7 366
District of Columbia -----	—	—	—	—	—	—	—	—	—
Florida -----	225	2 729	2 209	57 955	41 592	192 766	168 939	93 483	78 029
Georgia -----	116	1 580	1 276	32 952	23 507	109 573	91 220	63 398	37 483
Hawaii -----	19	496	416	23 386	18 920	77 119	70 644	51 579	(D)
Idaho -----	27	198	158	4 970	3 335	15 091	13 662	9 596	4 781
Illinois -----	149	2 620	2 121	80 685	60 669	226 170	207 463	143 382	69 586
Indiana -----	91	1 605	1 345	44 870	37 041	106 029	99 602	75 218	31 780
Iowa -----	24	451	377	11 542	9 630	23 250	(D)	17 855	(D)
Kansas -----	22	532	456	12 995	10 671	33 257	32 447	22 693	11 276
Kentucky -----	31	526	413	13 863	10 439	40 276	37 786	27 910	(D)
Louisiana -----	77	875	695	19 509	14 495	66 947	63 373	46 331	19 596
Maine -----	7	(D)	58	*1 797	*1 458	*4 375	*4 375	*2 690	*1 685
Maryland -----	59	1 091	909	33 722	25 992	96 505	91 273	57 376	34 836
Massachusetts -----	79	1 693	1 473	56 479	46 428	143 975	131 386	99 631	31 996
Michigan -----	160	2 301	1 816	68 703	52 120	241 336	210 932	137 441	77 635
Minnesota -----	54	1 038	870	36 611	30 068	103 387	96 968	75 014	24 637
Mississippi -----	28	333	282	5 545	4 306	22 192	19 595	11 471	8 124
Missouri -----	70	1 520	1 213	50 775	38 762	192 371	170 763	122 110	48 869
Montana -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nebraska -----	30	288	225	5 509	4 239	11 625	(D)	10 087	(D)
Nevada -----	28	664	557	23 014	18 495	75 430	70 320	53 022	(D)
New Hampshire -----	39	336	262	7 833	5 597	21 405	20 064	14 154	(D)
New Jersey -----	131	2 834	2 326	84 803	62 406	267 848	236 210	171 584	69 093
New Mexico -----	23	396	347	7 070	5 607	20 933	20 457	10 795	10 094
New York -----	282	2 976	2 294	104 578	74 599	306 554	273 211	200 382	81 267
North Carolina -----	99	1 191	996	22 886	17 355	63 665	58 811	45 505	15 554
North Dakota -----	*5	67	42	1 614	906	6 121	(D)	*4 443	(D)
Ohio -----	147	2 732	2 297	73 110	55 218	206 595	183 293	124 650	71 569
Oklahoma -----	64	854	693	19 916	14 125	56 143	50 846	32 421	23 176
Oregon -----	62	651	565	13 944	10 988	56 236	46 678	27 842	19 659
Pennsylvania -----	148	2 024	1 660	55 270	42 081	175 991	162 255	115 464	49 129
Rhode Island -----	15	212	164	9 811	7 548	29 926	(D)	18 939	(D)
South Carolina -----	60	714	587	15 670	12 286	38 458	33 947	27 601	8 182
South Dakota -----	30	170	142	3 001	2 569	12 550	10 127	6 285	(D)
Tennessee -----	45	967	811	22 573	18 157	57 785	53 683	36 191	19 506
Texas -----	293	4 672	3 905	110 676	82 785	311 941	283 818	191 947	105 350
Utah -----	51	565	460	19 108	14 933	57 168	49 285	28 750	20 674
Vermont -----	5	58	45	1 932	1 307	5 677	5 455	4 383	1 072
Virginia -----	73	1 197	982	32 340	24 975	89 745	79 260	54 771	26 556
Washington -----	49	1 126	893	41 753	32 702	119 793	107 745	73 650	(D)
West Virginia -----	22	252	187	4 754	3 666	16 536	15 345	9 644	5 701
Wisconsin -----	78	889	739	27 738	21 846	76 432	73 677	53 879	(D)
Wyoming -----	6	41	(D)	(D)	(D)	(D)	(D)	(D)	1 501

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
465 336	3 423 692	139 831	77 261	814 369	65 348	4 862 655	3 253 345	1	1	5	U.S.
2 356	23 381	2 585	(S)	15 389	799	35 511	23 814	8	8	(S)	AL
(D)	16 214	616	(D)	3 928	184	15 134	11 204	10	(D)	(D)	AK
12 264	81 669	(S)	2 137	18 422	1 237	84 388	58 860	7	6	18	AZ
1 226	(S)	*234	*252	4 453	569	31 889	18 806	21	15	50	AR
47 703	641 368	21 036	7 802	95 206	8 769	833 529	508 363	2	2	14	CA
15 506	81 290	2 804	1 378	11 696	1 186	92 963	52 324	17	14	25	CO
9 099	30 072	3 081	*650	8 658	1 062	89 965	50 868	12	6	45	CT
6 344	17 963	445	333	(D)	314	24 216	17 217	10	3	(Z)	DE
—	—	—	—	—	(D)	(D)	(D)	—	—	—	DC
23 828	145 732	5 107	2 690	37 539	3 272	168 615	113 792	9	6	32	FL
18 353	65 070	3 547	1 652	17 992	2 443	188 780	123 074	8	6	16	GA
6 475	63 436	1 162	537	10 008	458	46 755	35 178	8	6	15	HI
1 428	*4 845	*843	265	4 427	153	7 877	6 195	31	28	26	ID
18 707	188 771	7 858	3 059	33 401	2 839	240 950	160 461	5	4	19	IL
6 428	77 817	4 031	3 110	22 891	1 339	67 459	52 213	8	6	4	IN
(D)	20 578	570	*927	6 223	369	15 548	14 160	4	(D)	44	IA
810	28 065	916	*755	5 089	500	31 665	24 090	6	4	46	KS
2 490	28 974	1 339	531	8 845	736	54 999	35 287	12	6	2	KY
3 574	36 305	1 551	1 733	13 241	1 134	60 587	38 833	10	15	11	LA
—	(S)	(S)	(S)	(D)	37	2 308	1 455	(D)	51	(S)	ME
5 231	76 945	1 763	(S)	27 768	1 788	112 878	85 322	7	6	(S)	MD
12 589	129 773	2 046	2 010	16 872	2 022	149 182	110 820	7	4	19	MA
30 404	122 313	4 193	3 076	30 691	2 262	219 687	143 815	4	7	21	MI
6 419	94 692	3 032	2 033	25 291	1 401	126 835	83 232	6	6	22	MN
2 597	14 480	*485	*413	4 839	481	21 031	12 946	16	16	44	MS
21 608	96 235	4 370	1 626	26 037	1 031	64 911	46 720	6	4	21	MO
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	MT
(D)	8 655	299	285	2 604	190	8 182	6 545	28	(D)	(Z)	NE
*5 110	(S)	1 281	*2 012	*9 752	284	24 831	14 693	4	5	66	NV
1 341	19 314	463	*186	3 645	357	20 045	15 766	14	13	51	NH
31 638	117 837	5 728	2 715	38 509	2 808	228 986	176 422	5	1	7	NJ
477	10 214	521	1 215	*8 296	174	6 637	4 736	21	13	11	NM
33 343	218 589	8 729	3 478	50 131	4 899	414 577	276 622	4	3	8	NY
4 854	38 907	2 931	1 847	16 137	1 385	59 395	37 878	11	11	29	NC
(D)	2 648	*193	*83	*440	252	13 557	7 968	38	(D)	57	ND
23 302	144 119	6 057	4 269	34 099	2 028	138 590	96 145	3	3	3	OH
5 297	19 958	1 265	1 220	14 109	641	39 927	26 582	10	10	25	OK
*9 559	33 846	1 614	(S)	6 570	524	55 572	28 528	19	15	(S)	OR
13 736	100 629	5 903	*3 212	30 440	3 512	234 520	164 159	6	6	43	PA
(D)	(D)	(D)	(D)	3 181	162	19 833	18 505	9	(D)	(D)	RI
4 511	28 451	1 769	1 050	10 093	648	34 924	23 962	11	9	31	SC
*2 424	(S)	(D)	92	1 742	85	(D)	3 925	23	26	(Z)	SD
4 102	39 356	1 352	784	12 427	1 461	75 157	55 114	4	3	9	TN
28 123	178 843	12 939	6 654	51 641	4 916	305 417	232 634	4	3	17	TX
7 883	52 129	*848	*1 870	*9 297	483	58 887	26 323	12	8	65	UT
222	(S)	186	160	1 170	126	9 174	6 579	(Z)	(Z)	(Z)	VT
10 486	74 506	2 710	1 400	31 851	1 896	150 433	89 538	7	6	17	VA
12 048	80 105	4 117	1 457	9 068	975	81 263	50 030	7	6	5	WA
1 191	7 629	*831	*129	2 779	191	10 555	8 459	23	21	47	WV
2 756	44 163	1 489	724	10 269	799	66 489	45 206	10	8	20	WI
(D)	(D)	(D)	(D)	496	92	6 706	4 341	(Z)	(D)	(D)	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year -----	3 792	4 017	3 705	2 592	2	2	2	3
Proprietors and working partners -----	759	474	725	732	7	10	8	9
All employees** -----	57 986	65 348	61 588	47 166	1	1	1	1
Construction workers:								
March -----	45 510	52 494	51 042	35 862	1	1	1	1
May -----	47 109	53 652	52 355	41 138	1	1	1	1
August -----	48 891	57 794	55 758	44 432	1	1	1	1
November -----	47 042	54 978	50 354	42 106	1	1	1	1
Average -----	47 138	54 729	52 645	40 911	1	1	1	1
Other employees:								
March -----	10 815	10 631	8 904	6 000	1	1	1	1
May -----	10 787	10 621	(NA)	(NA)	1	1	(NA)	(NA)
August -----	10 781	10 460	(NA)	(NA)	1	1	(NA)	(NA)
November -----	11 009	10 761	(NA)	(NA)	1	1	(NA)	(NA)
Average -----	10 848	10 618	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees -----	1 628 902	1 593 989	1 291 214	673 768	1	1	1	(Z)
Payroll, construction workers -----	1 226 900	1 231 644	1 056 082	556 462	1	1	1	(Z)
Payroll, other employees -----	402 002	362 345	235 132	117 307	1	1	1	1
First-quarter payroll, all employees -----	373 315	360 261	296 023	140 704	1	1	1	(Z)
Fringe benefits, all employees -----	540 557	444 171	271 384	157 225	1	1	1	(Z)
Legally required expenditures -----	349 136	315 910	199 158	82 023	1	1	1	1
Voluntary expenditures -----	191 421	128 261	72 226	75 202	1	1	1	(Z)
Dollar value of business done -----	5 094 705	5 003 883	3 649 796	1 882 433	1	1	1	1
Value of construction work -----	4 952 038	4 862 655	3 540 666	1 803 301	1	1	1	1
Value of construction work subcontracted in from others -----	3 423 692	2 854 127	2 062 687	972 088	1	1	1	1
Other business receipts -----	142 666	141 227	109 130	79 133	3	2	1	2
Net value of construction work† -----	4 486 702	4 510 231	3 233 092	1 709 473	1	1	1	1
Value added†† -----	3 020 993	3 253 345	2 376 184	1 184 420	1	1	1	1
Selected costs -----	2 073 711	1 750 538	1 273 611	698 013	1	2	1	1
Materials, components, and supplies -----	1 532 883	1 318 112	903 529	574 784	1	2	1	1
Construction work subcontracted out to others -----	465 336	352 424	307 574	93 828	2	2	1	2
Selected power, fuels, and lubricants -----	75 492	80 001	62 508	29 402	2	1	1	1
Electricity -----	12 516	12 184	9 331	5 312	2	2	2	1
Natural and manufactured gas -----	3 795	3 260	3 259	1 109	3	2	2	2
Gasoline and diesel fuel -----	55 496	60 043	45 221	19 536	2	1	2	1
On highway use -----	46 415	50 011	(NA)	(NA)	2	1	(NA)	(NA)
Off highway use -----	9 080	10 031	(NA)	(NA)	5	3	(NA)	(NA)
Other, including lubricating oils and greases -----	3 685	4 513	4 695	3 446	5	3	3	2
Rental cost for machinery, equipment, and buildings -----	139 831	128 315	83 397	40 058	2	2	1	1
For machinery and equipment -----	105 486	100 090	64 903	32 822	3	2	1	1
For buildings -----	34 345	28 225	18 494	7 236	4	2	2	2
Selected purchased services -----	83 306	72 859	57 650	27 858	2	2	1	1
Communication services -----	24 963	22 321	16 080	8 253	2	2	2	2
Repairs to buildings and other structures -----	4 660	5 378	3 814	1 828	4	4	2	2
Repairs to machinery and equipment -----	53 683	45 160	37 755	17 778	3	2	1	1
Ownership of construction projects:								
Value of construction work -----	4 952 038	4 862 655	3 540 666	1 803 301	1	1	1	1
Government owned -----	1 683 311	1 118 531	604 653	331 237	2	2	2	1
Federal -----	351 957	279 813	(NA)	(NA)	4	2	(NA)	(NA)
State and local -----	1 331 354	838 717	(NA)	(NA)	2	2	(NA)	(NA)
Privately owned -----	3 268 728	3 744 124	2 936 012	1 472 064	2	2	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	773 537	631 687	2	2
Capital expenditures, other than land -----	77 261	71 250	5	3
New -----	57 172	54 185	5	4
Used -----	20 090	17 065	7	4
Retirements and disposition of depreciable assets -----	36 429	48 131	5	4
End-of-year gross book value of depreciable assets -----	814 369	654 807	2	2
Depreciation charges during year -----	80 949	76 477	3	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	115 043	115 765	7	4
Capital expenditures, other than land -----	8 671	8 502	15	6
New buildings and other structures -----	6 479	6 066	16	6
Used buildings and other structures -----	2 192	2 435	16	13
Retirements and disposition of depreciable assets -----	3 313	4 839	8	17
End-of-year gross book value of depreciable assets -----	120 401	119 429	7	4
Depreciation charges during year -----	9 664	8 697	9	3
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	658 494	515 921	2	2
Capital expenditures, other than land -----	68 590	62 748	5	3
New machinery and equipment, including automobiles and trucks -----	50 692	48 118	5	4
New automobiles and trucks, intended primarily for highway use -----	17 805	20 571	8	4
Used machinery and equipment, including automobiles and trucks -----	17 898	14 630	7	4
Retirements and disposition of depreciable assets -----	33 116	43 291	6	4
End-of-year gross book value of depreciable assets -----	693 968	535 377	2	2
Depreciation charges during year -----	71 285	67 779	3	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	3 792	2
Value of construction work	4 952 038	1
Establishments with inventories:		
Number	1 055	4
Value of construction work	2 209 122	1
Inventories ¹ :		
End of 1992, materials and supplies	56 864	4
End of 1991, materials and supplies	54 844	3
Establishments with no inventories:		
Number	1 602	3
Value of construction work	1 841 722	2
Establishments not reporting:		
Number	1 134	3
Value of construction work	901 195	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	3 792	1 349	867	807	556	145	55	9	3	—
All employees** -----	57 986	2 919	5 441	10 828	16 641	9 866	7 598	2 780	1 913	—
Payroll, all employees -----	1 628 902	52 532	126 753	272 461	496 248	315 238	245 433	78 004	42 232	—
Dollar value of business done -----	5 094 705	237 232	416 362	837 824	1 463 424	962 561	794 999	382 302	(D)	—
Value of construction work -----	4 952 038	231 075	404 941	822 190	1 415 192	944 349	763 913	<u>370 378</u>	(D)	—
Net value of construction work† -----	4 486 702	207 508	367 475	731 988	1 275 048	875 980	697 565	<u>331 138</u>	(D)	—
Value added†† -----	3 020 993	134 192	249 215	504 797	846 899	553 292	485 827	<u>246 772</u>	(D)	—
Cost of materials, components, supplies, and fuels -----	1 608 375	79 473	129 682	242 825	476 381	340 900	242 824	<u>96 290</u>	(D)	—
Cost of construction work subcontracted out to others -----	465 336	23 567	37 466	90 202	140 145	68 368	66 348	<u>39 240</u>	(D)	—
Rental cost for machinery, equipment, and buildings -----	139 831	5 266	12 386	22 151	48 391	23 735	17 189	<u>10 713</u>	(D)	—
Capital expenditures, other than land -----	77 261	3 368	10 769	12 643	25 850	11 183	10 083	<u>3 366</u>	(D)	—
End-of-year gross book value of depreciable assets -----	814 369	38 269	69 531	157 004	231 994	142 811	132 139	<u>42 622</u>	(D)	—
1987										
All employees** -----	65 348	(S)	6 918	11 713	17 755	11 124	8 957	2 943	3 163	—
Value of construction work -----	4 862 655	(S)	413 035	811 373	1 299 448	918 956	762 855	<u>459 328</u>	(D)	—
Value added†† -----	3 253 345	(S)	268 511	514 912	888 567	641 857	496 497	178 696	142 621	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	6	6	4	2	3	(Z)	(Z)	(Z)	—
Net value of construction work† -----	1	8	7	3	1	2	(Z)	(Z)	(D)	—
Capital expenditures, other than land -----	5	23	21	13	3	3	(Z)	(Z)	(D)	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	3 792	(S)	(S)	352	830	569	672	614	278	120	81
All employees** -----	57 986	(S)	(S)	1 003	3 206	4 096	7 504	12 347	9 816	7 711	11 884
Payroll, all employees -----	1 628 902	(S)	(S)	9 495	51 432	78 902	175 734	337 462	302 579	249 788	420 636
Dollar value of business done -----	5 094 705	(S)	(S)	25 188	134 779	201 812	476 569	935 560	952 573	835 452	1 525 651
Value of construction work -----	4 952 038	(S)	(S)	24 419	133 696	199 055	463 437	908 823	933 781	801 928	1 479 780
Net value of construction work† -----	4 486 702	(S)	(S)	23 395	124 763	190 147	434 936	838 989	839 762	707 935	1 319 890
Value added†† -----	3 020 993	(S)	(S)	17 220	91 086	145 671	308 948	580 239	555 611	461 436	855 780
Cost of materials, components, supplies, and fuels -----	1 608 375	(S)	(S)	6 945	34 761	47 233	139 120	285 486	302 942	280 023	509 981
Cost of construction work subcontracted out to others -----	465 336	(S)	(S)	(S)	8 933	8 908	28 501	69 835	94 019	93 993	159 890
Rental cost for machinery, equipment, and buildings -----	139 831	(S)	(S)	661	3 243	6 518	18 231	32 091	24 917	22 458	31 572
Capital expenditures, other than land -----	77 261	(S)	(S)	*586	1 975	4 969	12 381	15 549	14 534	13 206	13 873
End-of-year gross book value of depreciable assets -----	814 369	(S)	(S)	(S)	26 063	28 901	110 469	165 265	141 630	129 836	205 387
1987											
All employees** -----	65 348	(S)	(S)	(S)	(S)	5 358	7 539	13 618	12 403	8 411	12 074
Value of construction work -----	4 862 655	(S)	(S)	(S)	(S)	248 816	443 153	961 404	945 586	721 047	1 357 934
Value added†† -----	3 253 345	(S)	(S)	(S)	(S)	173 404	302 070	658 396	671 509	457 502	856 396
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	15	9	8	5	3	3	(Z)	(Z)
Net value of construction work† -----	1	(S)	(S)	12	7	7	5	3	3	(Z)	(Z)
Capital expenditures, other than land -----	5	(S)	(S)	44	19	27	16	11	3	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	4 952 038	3 400 849	1 049 136	452 296	1	1	1	2
Building construction	3 368 144	2 524 836	674 687	168 621	1	1	2	3
Single-family houses	105 828	75 623	19 137	11 069	8	9	10	28
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	82 471	65 570	11 655	5 246	6	7	2	15
Other residential buildings, including hotels, motels, and tourist cabins	85 507	74 600	8 874	2 033	2	1	6	5
Office buildings	543 864	448 895	82 218	12 751	2	2	4	3
Other commercial buildings such as stores, restaurants, and automobile service stations	645 706	497 292	119 133	29 281	3	3	4	6
Industrial buildings and warehouses	1 069 324	729 270	245 931	94 123	2	2	3	3
Industrial buildings	824 492	532 357	206 732	85 403	2	2	3	3
Warehouses	244 832	196 913	39 199	8 720	4	4	4	14
Religious buildings	68 960	48 316	19 185	1 459	4	4	8	10
Educational buildings	298 443	230 117	63 712	4 615	2	3	3	3
Hospitals and institutional buildings	301 080	207 767	88 661	4 652	1	2	3	4
Farm buildings, nonresidential	27 928	19 348	*7 088	1 492	15	13	43	10
Amusement, social, and recreational buildings, indoors	63 813	58 260	5 057	496	3	3	9	1
Other nonresidential buildings	75 219	69 778	4 037	1 405	17	18	1	21
Nonbuilding construction	1 534 136	876 013	374 449	283 674	2	2	3	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	288 586	206 582	62 126	19 878	2	2	4	5
Bridges, tunnels, and elevated highways	162 969	63 254	92 922	6 792	3	6	(Z)	9
Dam and reservoir construction	(D)	(D)	998	243	(D)	(D)	6	18
Power and communication transmission lines, towers, and related facilities	(D)	(D)	(D)	7 983	(D)	(D)	(D)	20
Sewers, water mains, and related facilities	67 412	44 254	7 003	16 155	15	19	22	16
Sewers, sewer lines, septic systems, and related facilities	27 033	19 448	1 807	5 779	21	24	32	33
Water mains and related facilities	40 379	24 806	5 196	10 377	20	29	28	15
Mass transit construction	51 870	(D)	(D)	*471	(Z)	(D)	(D)	45
Blast furnaces, petroleum refineries, chemical complexes, etc.	221 118	73 152	58 111	89 854	3	3	8	2
Power plants	131 362	46 136	(D)	(D)	3	8	(D)	(D)
Sewage treatment and water treatment plants	133 405	110 985	19 045	3 375	4	3	12	7
Sewage treatment plants	82 003	69 260	11 714	1 029	5	5	9	2
Water treatment plants	51 402	41 725	7 331	2 346	4	2	22	10
Water storage facilities	85 525	70 827	6 231	8 466	8	6	20	14
Oilfields	37 131	(D)	(D)	(D)	7	(D)	(D)	(D)
Other nonbuilding construction	287 350	174 388	64 300	48 662	5	5	11	8
Construction work, n.s.k.	49 759	(NA)	(NA)	(NA)	15	(NA)	(NA)	(NA)
1987								
Value of construction work	4 862 655	3 778 867	620 592	235 132	1	1	1	3
Building construction	3 608 424	2 985 155	482 984	140 285	1	1	2	4
Single-family houses	68 448	59 848	6 825	1 774	11	12	24	11
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	157 515	146 039	8 783	2 692	4	4	4	7
Other residential buildings, including hotels, motels, and tourist cabins	193 764	173 008	16 126	4 628	2	1	6	18
Office buildings	930 225	832 945	82 321	14 959	1	1	2	4
Other commercial buildings such as stores, restaurants, and automobile service stations	542 481	449 447	75 886	17 147	2	2	3	5
Industrial buildings and warehouses	1 173 121	898 167	200 693	74 260	1	1	2	6
Industrial buildings	882 867	651 255	168 244	63 367	1	2	2	7
Warehouses	290 253	246 912	32 449	10 892	3	3	6	11
Religious buildings	42 482	35 436	5 456	1 589	4	4	7	12
Educational buildings	145 788	107 214	32 832	5 741	3	4	6	13
Hospitals and institutional buildings	182 698	144 191	32 985	5 521	2	2	6	13
Farm buildings, nonresidential	21 707	16 742	2 094	2 870	22	25	25	25
Amusement, social, and recreational buildings, indoors	53 207	42 305	10 111	791	8	8	8	10
Other nonresidential buildings	96 983	79 807	8 867	8 308	3	3	14	18
Nonbuilding construction	1 026 168	793 712	137 608	94 847	3	3	3	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	202 129	162 339	28 998	10 792	3	3	7	4
Bridges, tunnels, and elevated highways	106 293	85 813	18 544	1 935	2	3	2	2
Sewers, water mains, and related facilities	61 466	52 966	4 205	4 295	4	4	2	21
Blast furnaces, petroleum refineries, chemical complexes, etc.	131 858	85 932	24 389	21 536	3	2	8	3
Power plants	57 840	31 981	4 614	21 243	3	2	18	5
Sewage treatment and water treatment plants	130 957	111 749	16 899	2 308	6	6	7	15
Sewage treatment plants	78 348	67 930	8 803	1 614	4	4	11	22
Water treatment plants	52 609	43 818	8 095	694	12	14	8	9
Water storage facilities	124 902	101 929	10 380	12 591	4	5	(Z)	8
Other nonbuilding construction	210 723	161 003	29 578	20 146	8	9	7	14
Construction work, n.s.k.	228 064	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
All establishments -----	3 792	57 986	1 628 902	4 952 038	2 598 439	4 486 702	3 020 993	465 336	1	1	2
Establishments not specializing by type -----	1 162	21 899	653 852	1 888 736	(NA)	1 735 005	1 159 692	153 731	2	2	2
Establishments specializing 51 percent or more -----	2 630	36 087	975 050	3 063 302	2 598 439	2 751 697	1 861 301	311 605	2	1	3
OFFICE BUILDINGS											
All establishments specializing in type -----	161	3 035	82 550	258 705	197 864	232 546	150 499	26 159	5	3	4
Establishments with —											
100 percent specialization -----	71	760	19 454	51 680	51 680	47 538	35 484	4 141	17	13	5
90 to 99 percent specialization -----	7	176	6 411	18 353	16 916	(D)	12 782	(D)	(Z)	(Z)	(D)
80 to 89 percent specialization -----	18	453	10 932	44 926	36 161	(D)	22 695	(D)	9	6	(D)
70 to 79 percent specialization -----	40	786	20 171	72 184	51 873	62 296	35 894	9 888	11	6	9
60 to 69 percent specialization -----	16	568	16 671	43 267	26 134	38 710	27 233	4 557	6	5	8
51 to 59 percent specialization -----	9	291	8 911	28 295	15 100	24 749	16 411	3 546	7	2	(Z)
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	430	5 485	137 713	418 518	356 841	368 915	249 510	49 604	4	5	12
Establishments with —											
100 percent specialization -----	232	2 849	67 077	200 374	200 374	179 654	137 744	20 720	6	8	19
90 to 99 percent specialization -----	30	358	9 810	25 784	23 963	24 238	16 118	1 546	11	9	21
80 to 89 percent specialization -----	37	747	17 868	54 007	44 325	52 347	32 500	1 659	14	12	27
70 to 79 percent specialization -----	73	472	13 408	48 392	35 739	38 572	18 923	9 820	15	9	5
60 to 69 percent specialization -----	33	580	15 188	45 780	28 508	36 914	21 472	*8 867	15	17	49
51 to 59 percent specialization -----	26	479	14 362	44 181	23 933	37 189	22 753	6 992	12	9	3
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	481	7 004	192 724	553 977	465 264	509 939	368 918	44 038	3	3	11
Establishments with —											
100 percent specialization -----	291	3 045	80 835	209 257	209 257	191 871	143 169	17 386	6	4	8
90 to 99 percent specialization -----	38	903	22 724	83 405	76 564	79 911	48 039	3 494	7	1	2
80 to 89 percent specialization -----	36	872	25 080	59 497	48 686	56 545	45 910	2 952	5	5	7
70 to 79 percent specialization -----	53	770	21 218	72 271	51 842	66 286	48 290	5 985	9	7	11
60 to 69 percent specialization -----	51	1 047	32 007	89 514	56 194	79 876	60 993	*9 637	6	13	48
51 to 59 percent specialization -----	11	366	10 860	40 034	22 722	35 450	22 518	4 584	5	7	10
WAREHOUSES											
All establishments specializing in type -----	155	1 340	28 371	77 984	60 392	69 553	49 597	8 430	11	12	15
Establishments with —											
100 percent specialization -----	73	407	7 671	20 575	20 575	18 898	14 029	1 677	19	18	5
90 to 99 percent specialization -----	4	96	3 183	10 176	9 172	(D)	5 688	(D)	(Z)	(Z)	(D)
80 to 89 percent specialization -----	*15	*129	*2 966	*6 548	*5 256	(D)	4 082	(D)	43	42	(D)
70 to 79 percent specialization -----	*27	195	3 862	9 216	6 652	9 012	7 370	204	32	26	16
60 to 69 percent specialization -----	23	371	7 693	23 285	14 306	21 179	13 619	*2 106	24	32	49
51 to 59 percent specialization -----	*12	142	2 996	8 184	4 432	7 841	4 809	343	26	17	24
EDUCATIONAL BUILDINGS											
All establishments specializing in type -----	90	1 023	29 546	87 867	59 717	75 229	50 804	12 638	12	7	1
Establishments with —											
100 percent specialization -----	*26	*126	*1 707	3 656	3 656	3 626	2 146	(S)	65	31	(S)
90 to 99 percent specialization -----	(S)	73	2 628	7 946	7 409	(D)	6 548	(D)	26	16	(D)
80 to 89 percent specialization -----	12	160	3 238	9 358	7 553	9 146	7 219	211	21	21	17
70 to 79 percent specialization -----	9	144	4 120	12 833	9 168	(D)	8 263	(D)	29	30	(D)
60 to 69 percent specialization -----	21	270	9 735	25 844	15 884	23 571	15 543	2 273	10	6	1
51 to 59 percent specialization -----	9	249	8 118	28 230	16 049	(D)	11 085	(D)	30	11	(D)
HIGHWAYS, STREETS, AND RELATED WORK SUCH AS INSTALLATION OF GUARD RAILS, HIGHWAY SIGNS, LIGHTING, ETC.											
All establishments specializing in type -----	160	2 456	73 199	217 655	182 800	208 342	133 593	9 314	5	3	1
Establishments with —											
100 percent specialization -----	78	1 286	39 004	107 023	107 023	105 869	68 496	1 155	8	4	9
90 to 99 percent specialization -----	13	195	5 544	21 509	20 604	(D)	10 682	(D)	17	7	(D)
80 to 89 percent specialization -----	(S)	206	5 478	13 078	10 819	(D)	7 746	(D)	9	2	(D)
70 to 79 percent specialization -----	5	121	3 656	10 108	7 160	(D)	5 219	(D)	(Z)	(Z)	(D)
60 to 69 percent specialization -----	32	276	5 872	17 908	11 003	17 844	14 340	*64	23	32	66
51 to 59 percent specialization -----	10	373	13 644	48 029	26 190	41 942	27 109	6 087	4	2	(Z)
BLAST FURNACES, PETROLEUM REFINERIES, CHEMICAL COMPLEXES, ETC.											
All establishments specializing in type -----	49	1 654	64 142	231 040	186 677	203 051	141 819	27 989	4	3	10
Establishments with —											
100 percent specialization -----	26	924	33 983	110 488	110 488	93 226	51 521	17 262	6	4	10
90 to 99 percent specialization -----	—	—	—	—	—	—	—	—	—	—	—
80 to 89 percent specialization -----	5	193	6 569	17 917	14 951	16 546	9 736	1 371	(Z)	(Z)	(Z)
70 to 79 percent specialization -----	*10	215	(D)	(D)	(D)	(D)	(D)	(D)	12	(D)	(D)
60 to 69 percent specialization -----	*8	(D)	3 352	9 822	6 006	9 032	6 421	*790	(D)	(D)	29
51 to 59 percent specialization -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	57

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	3 792	47 138	45 510	47 109	48 891	47 042	2	1	1	1	1	1
Alabama	44	745	739	762	723	757	12	8	7	7	10	10
Alaska	12	83	62	71	95	105	17	10	6	11	10	9
Arizona	77	1 081	1 071	1 075	1 180	998	15	7	7	7	7	8
Arkansas	30	323	284	344	359	304	21	22	20	20	24	23
California	468	5 937	5 815	6 049	6 108	5 775	7	2	2	2	3	2
Colorado	69	1 087	980	1 218	1 147	1 002	17	18	16	22	18	17
Connecticut	53	408	380	386	446	421	16	13	12	12	13	16
Delaware	14	167	146	166	188	167	30	10	9	8	16	8
District of Columbia												
Florida	225	2 209	1 913	2 420	2 289	2 215	9	10	8	11	11	11
Georgia	116	1 276	1 442	1 259	1 170	1 233	12	8	7	8	9	9
Hawaii	19	416	468	384	405	406	10	9	8	9	9	9
Idaho	27	158	160	162	155	156	32	31	27	29	34	35
Illinois	149	2 121	1 953	2 137	2 378	2 015	10	5	5	4	4	5
Indiana	91	1 345	1 206	1 247	1 573	1 356	14	8	8	7	10	7
Iowa	24	377	369	349	383	408	20	5	(Z)	3	10	4
Kansas	22	456	459	495	379	490	12	6	3	5	8	9
Kentucky	31	413	368	389	426	469	14	13	10	9	15	21
Louisiana	77	695	740	645	695	699	18	10	10	9	10	11
Maine	7	58	(S)	58	74	60	35	36	(S)	36	31	37
Maryland	59	909	888	907	946	895	12	6	6	7	8	6
Massachusetts	79	1 473	1 806	1 268	1 017	1 799	16	7	5	10	12	6
Michigan	160	1 816	1 565	1 840	2 064	1 797	10	4	5	4	4	4
Minnesota	54	870	716	874	989	900	20	5	3	5	6	6
Mississippi	28	282	234	372	254	270	7	15	15	27	19	17
Missouri	70	1 213	1 242	1 035	1 303	1 270	11	7	7	8	8	7
Montana	2	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
Nebraska	30	225	202	215	272	212	36	28	26	29	26	23
Nevada	28	557	413	514	676	628	18	3	5	3	2	3
New Hampshire	39	262	223	277	244	303	22	14	12	17	14	15
New Jersey	131	2 326	2 350	2 371	2 271	2 313	10	6	8	8	3	5
New Mexico	23	347	359	358	339	334	25	24	21	24	26	27
New York	282	2 294	2 278	2 375	2 349	2 172	11	4	5	4	4	4
North Carolina	99	996	938	1 094	1 001	951	14	11	11	13	11	11
North Dakota	*5	42	25	33	62	*46	45	39	31	31	39	41
Ohio	147	2 297	2 167	2 303	2 387	2 332	9	2	2	3	2	3
Oklahoma	64	693	734	681	664	693	19	9	9	8	10	10
Oregon	62	565	573	585	564	538	21	19	21	26	19	14
Pennsylvania	148	1 660	1 501	1 559	1 895	1 684	15	5	4	4	5	11
Rhode Island	15	164	138	153	188	176	28	5	3	3	8	4
South Carolina	60	587	640	550	557	600	20	10	10	10	10	9
South Dakota	30	142	130	113	149	176	35	20	15	17	21	28
Tennessee	45	811	790	798	819	838	9	3	4	4	3	4
Texas	293	3 905	3 756	4 043	4 034	3 786	9	4	4	4	5	5
Utah	51	460	448	458	526	406	18	12	11	11	16	11
Vermont	5	45	45	35	47	54	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Virginia	73	982	1 160	883	918	968	16	6	8	6	8	6
Washington	49	893	831	857	1 020	862	18	7	5	10	8	9
West Virginia	22	187	159	181	211	197	17	24	33	28	25	20
Wisconsin	78	739	559	721	913	765	18	11	9	16	10	11
Wyoming	6	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	4 952 038	3 731	3 861 382	1 920	1 090 656	4 862 655	1.8	1	1	1
Alabama -----	54 697	44	36 298	43	18 399	60 950	-10.3	7	9	8
Alaska -----	17 158	12	(D)	2	(D)	17 292	-8	8	(D)	(D)
Arizona -----	100 506	77	88 428	22	12 078	88 457	13.6	6	7	9
Arkansas -----	30 097	26	24 281	37	5 816	29 516	2.0	9	11	6
California -----	804 198	468	725 932	53	78 266	882 016	-8.8	2	2	1
Colorado -----	80 521	65	72 339	24	8 182	55 501	45.1	16	18	8
Connecticut -----	64 487	53	55 804	36	8 683	101 139	-36.2	5	6	6
Delaware -----	20 836	14	13 982	37	6 854	20 631	1.0	5	4	12
District of Columbia -----	20 132	—	—	36	20 132	18 461	9.0	4	—	4
Florida -----	201 556	225	178 519	70	23 037	187 223	7.7	5	6	3
Georgia -----	120 140	116	92 768	77	27 373	149 641	-19.7	5	6	3
Hawaii -----	115 404	19	77 119	*16	38 285	53 371	116.2	4	6	1
Idaho -----	16 780	(S)	14 050	10	2 730	15 396	9.0	22	27	12
Illinois -----	250 611	148	204 186	64	46 425	252 249	-6	3	4	2
Indiana -----	124 364	84	93 153	62	31 211	77 207	61.1	5	7	4
Iowa -----	22 954	23	12 406	38	10 548	19 001	20.8	4	6	7
Kansas -----	38 356	21	20 353	35	18 004	28 243	35.8	3	4	4
Kentucky -----	42 324	25	18 706	71	23 618	46 846	-9.7	2	5	2
Louisiana -----	87 868	77	61 047	38	26 821	75 415	16.5	11	16	1
Maine -----	8 345	(S)	*4 035	13	4 310	16 634	-49.8	27	55	6
Maryland -----	68 126	54	51 468	65	16 659	84 825	-19.7	8	10	4
Massachusetts -----	105 175	78	81 620	55	23 554	184 697	-43.1	5	7	3
Michigan -----	206 790	160	199 756	31	7 033	213 555	-3.2	8	8	2
Minnesota -----	77 409	54	70 891	14	6 517	123 694	-37.4	7	8	3
Mississippi -----	29 256	27	15 781	40	13 475	24 640	18.7	13	22	11
Missouri -----	107 401	66	88 710	51	18 691	77 534	38.5	6	7	9
Montana -----	4 091	2	(D)	6	(D)	1 857	120.3	1	(D)	(D)
Nebraska -----	16 490	30	11 207	29	5 283	13 821	19.3	9	14	4
Nevada -----	89 998	28	71 895	31	18 104	45 579	97.5	7	8	7
New Hampshire -----	18 202	38	13 527	*18	4 675	13 593	33.9	12	16	2
New Jersey -----	150 075	122	102 173	62	47 902	192 414	-22.0	2	3	1
New Mexico -----	38 015	23	20 082	25	17 932	8 379	353.7	8	14	9
New York -----	430 923	282	291 786	85	139 137	446 441	-3.5	3	4	1
North Carolina -----	84 253	99	54 949	49	29 304	64 835	30.0	8	13	2
North Dakota -----	8 205	*5	6 121	*9	*2 083	12 718	-35.5	33	38	62
Ohio -----	239 501	147	182 204	71	57 297	164 092	46.0	4	5	2
Oklahoma -----	38 430	59	34 111	12	4 320	36 543	5.2	12	14	2
Oregon -----	73 545	61	52 989	20	20 556	12 700	479.1	15	21	(Z)
Pennsylvania -----	242 582	147	142 292	101	100 290	226 898	6.9	4	7	2
Rhode Island -----	18 466	15	(D)	9	(D)	9 709	90.2	2	(D)	(D)
South Carolina -----	44 886	57	28 967	41	15 919	36 294	23.7	9	14	7
South Dakota -----	9 310	29	*8 587	*7	723	5 696	63.5	39	43	23
Tennessee -----	49 098	45	34 814	33	14 284	77 763	-36.9	4	5	10
Texas -----	250 605	291	229 260	55	21 345	230 937	8.5	4	4	11
Utah -----	30 686	49	23 741	9	6 945	36 317	-15.5	11	14	1
Vermont -----	4 690	(S)	4 253	*17	437	8 292	-43.4	2	(Z)	18
Virginia -----	78 298	72	55 089	75	23 209	120 088	-34.8	6	8	11
Washington -----	97 004	49	77 221	42	19 782	104 727	-7.4	7	9	3
West Virginia -----	28 456	22	13 857	37	14 600	25 054	13.6	12	24	7
Wisconsin -----	83 004	78	65 035	24	17 968	53 026	56.5	7	9	(Z)
Wyoming -----	7 732	6	(D)	9	(D)	10 724	-27.9	4	(D)	(D)

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	5 094 705	5 003 883	1	1
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS				
Heavy construction contractor	55 500	(NA)	2	(NA)
SPECIAL TRADE CONTRACTORS				
Curtain wall installation contractor	241 219	209 561	3	2
Glass and glazing contractor	61 766	27 972	4	1
Millwright	53 096	53 252	4	9
Precast concrete installation contractor	303 008	236 869	4	3
Reinforcing steel contractor	1 041 360	933 933	2	2
Special cases	36 817	(NA)	13	(NA)
Storage tanks, metal: erection contractor	467 820	230 367	3	11
Structural steel erection contractor	2 468 542	2 888 258	1	1
Other construction activities	213 718	237 082	5	(NA)
OTHER BUSINESS ACTIVITIES				
Manufacturing	60 997	17 923	5	7
Rental of construction machinery or equipment to others	30 391	29 294	3	7
Other business activities	47 061	97 373	6	(NA)
Kind of business activity, n.s.k.	13 410	41 999	6	6

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	15.3	16.3	2
Number of construction workers	12.4	13.6	2
Number of all other employees	2.9	2.6	2
Payroll, all employees \$1,000 ..	429.6	396.8	2
Payroll, construction workers do ..	323.6	306.6	2
Payroll, other employees do ..	106.0	90.2	2
Dollar value of business done do ..	1 343.7	1 245.7	2
Value of construction work do ..	1 306.0	1 210.5	2
Cost of materials, components, supplies, and fuels	424.2	348.0	2
Construction work subcontracted to others	122.7	87.7	3
Rental cost for machinery, equipment, and buildings	36.9	31.9	3
Capital expenditures, other than land	20.4	17.7	5
Gross book value of depreciable assets	214.8	163.0	3
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	28.1	24.4	1
Dollar value of business done do ..	87.9	76.6	1
Value added†† do ..	52.1	49.8	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	26.0	22.5	1
Value of construction work do ..	105.1	88.8	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	37.1	34.1	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees .....	.329	.328	1
Cost of materials, components, supplies, and fuels .....	.325	.288	1
Cost of construction work subcontracted out to others .....	.094	.072	2
Value of construction work subcontracted in from others .....	.691	.587	1
Rental cost for machinery, equipment, and buildings .....	.028	.026	2

Table 13. **Selected Industry Ratios for Establishments With Payroll by State: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	15.3	28.1	105.1	.329	.325	.094	.691	.028
Alabama -----	20.0	23.4	58.1	.472	(D)	.054	.540	.060
Alaska -----	9.8	65.8	315.2	.299	.318	(D)	.620	.024
Arizona -----	17.7	21.9	100.5	.273	.471	.113	.751	(S)
Arkansas -----	13.2	19.8	94.7	.257	.331	.040	(S)	*.008
California -----	16.3	31.0	128.2	.310	.397	.063	.842	.028
Colorado -----	18.8	28.0	103.7	.324	.283	.138	.721	.025
Connecticut -----	10.3	31.3	149.7	.281	.470	.149	.492	.050
Delaware -----	15.8	33.2	146.1	.309	.302	.260	.736	.018
District of Columbia -----	—	—	—	—	—	—	—	—
Florida -----	12.1	21.2	87.3	.301	.405	.124	.756	.026
Georgia -----	13.6	20.9	85.9	.301	.342	.167	.594	.032
Hawaii -----	25.6	47.1	185.4	.303	(D)	.084	.823	.015
Idaho -----	7.4	25.1	95.5	.329	.317	.095	.321	.056
Illinois -----	17.5	30.8	106.6	.357	.308	.083	.835	.035
Indiana -----	17.7	28.0	78.8	.423	.300	.061	.734	.038
Iowa -----	19.0	25.6	61.7	.496	(D)	(D)	.885	.025
Kansas -----	23.8	24.4	72.9	.391	.339	.024	.844	.028
Kentucky -----	17.1	26.4	97.5	.344	(D)	.062	.719	.033
Louisiana -----	11.3	22.3	96.3	.291	.293	.053	.542	.023
Maine -----	(D)	(D)	75.4	.411	.385	—	(S)	(S)
Maryland -----	18.6	30.9	106.2	.349	.361	.054	.797	.018
Massachusetts -----	21.5	33.4	97.7	.392	.222	.087	.901	.014
Michigan -----	14.4	29.9	132.9	.285	.322	.126	.507	.017
Minnesota -----	19.1	35.3	118.8	.354	.238	.062	.916	.029
Mississippi -----	11.7	16.7	78.7	.250	.366	.117	.652	.022
Missouri -----	21.8	33.4	158.6	.264	.254	.112	.500	.023
Montana -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nebraska -----	9.6	19.1	51.7	.474	(D)	(D)	.744	.026
Nevada -----	24.1	34.7	135.4	.305	(D)	.068	(S)	.017
New Hampshire -----	8.7	23.3	81.7	.366	(D)	.063	.902	.022
New Jersey -----	21.7	29.9	115.2	.317	.258	.118	.440	.021
New Mexico -----	17.6	17.9	60.3	.338	.482	.023	.488	.025
New York -----	10.5	35.1	133.6	.341	.265	.109	.713	.028
North Carolina -----	12.0	19.2	63.9	.359	.244	.076	.611	.046
North Dakota -----	12.2	24.1	145.7	.264	(D)	(D)	*.433	.032
Ohio -----	18.6	26.8	89.9	.354	.346	.113	.698	.029
Oklahoma -----	13.3	23.3	81.0	.355	.413	.094	.355	.023
Oregon -----	10.5	21.4	99.5	.248	.350	*.170	.602	.029
Pennsylvania -----	13.7	27.3	106.0	.314	.279	.078	.572	.034
Rhode Island -----	14.3	46.3	182.5	.328	(D)	(D)	(D)	(D)
South Carolina -----	12.0	21.9	65.5	.407	.213	.117	.740	*.046
South Dakota -----	5.7	17.7	88.4	.239	(D)	.193	(S)	(D)
Tennessee -----	21.6	23.3	71.3	.391	.338	.071	.681	.023
Texas -----	15.9	23.7	79.9	.355	.338	.090	.573	.041
Utah -----	11.1	33.8	124.3	.334	.362	.138	.912	.015
Vermont -----	11.6	33.3	126.2	.340	.189	.039	(S)	.033
Virginia -----	16.5	27.0	91.4	.360	.296	.117	.830	.030
Washington -----	22.8	37.1	134.1	.349	(D)	.101	.669	.034
West Virginia -----	11.6	18.9	88.4	.287	.345	.072	.461	*.050
Wisconsin -----	11.3	31.2	103.4	.363	(D)	.036	.578	.019
Wyoming -----	6.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Appendix A.

Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

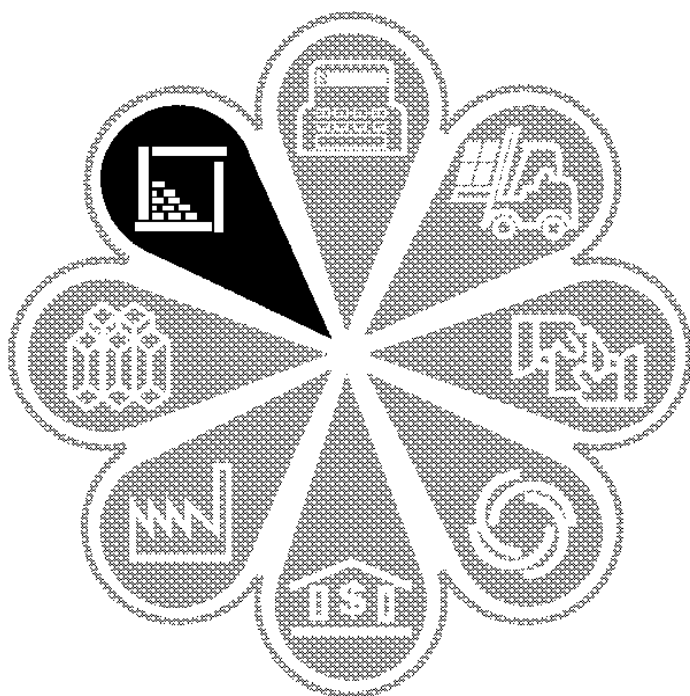
Census of Construction Industries

CC92-I-22

INDUSTRY SERIES

Glass and Glazing Work Special Trade Contractors

Industry 1793



1992 Census of Construction Industries

CC92-I-22

INDUSTRY SERIES

Glass and Glazing Work Special Trade Contractors

Industry 1793

Issued June 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year— buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Summary of Findings

Establishments classified in this industry are primarily engaged in glass and glazing work in connection with, but not limited to, building construction. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$2.9 billion in total dollar value of business. Of this amount, \$2.7 billion were for the value of construction work. These establishments paid out \$1.4 billion for materials, components, and supplies and \$90 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$46 million. Value added for 1992 was \$1.4 billion.

There were 4,590 establishments with total employment averaging 32,067 during the year. Total payroll for 1992 was \$796 million.

Larger establishments with 20 employees or more, while representing only 6 percent of the total number of

employer establishments in this industry, accounted for 35 percent of all business done.

A “construction establishment” is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

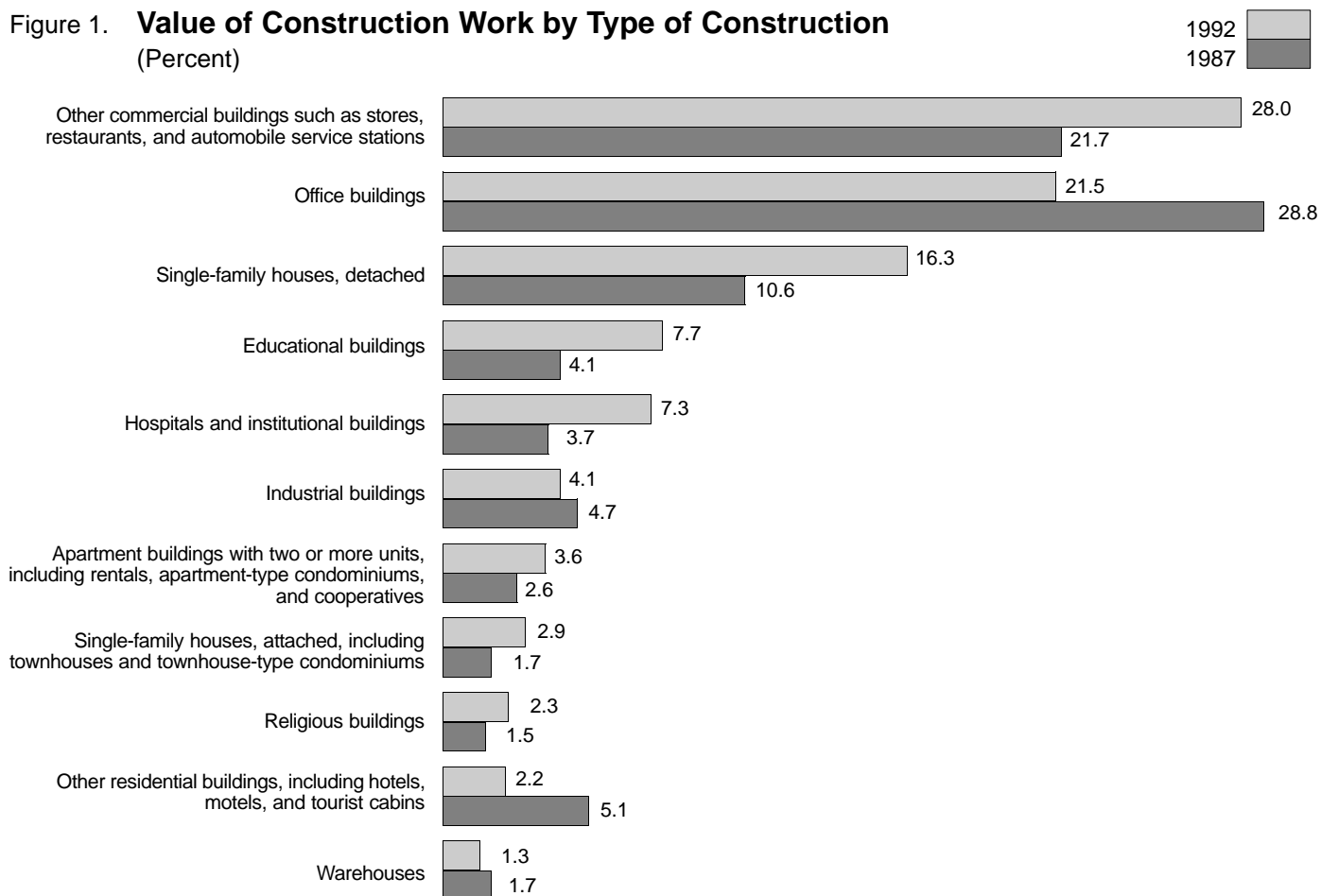


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

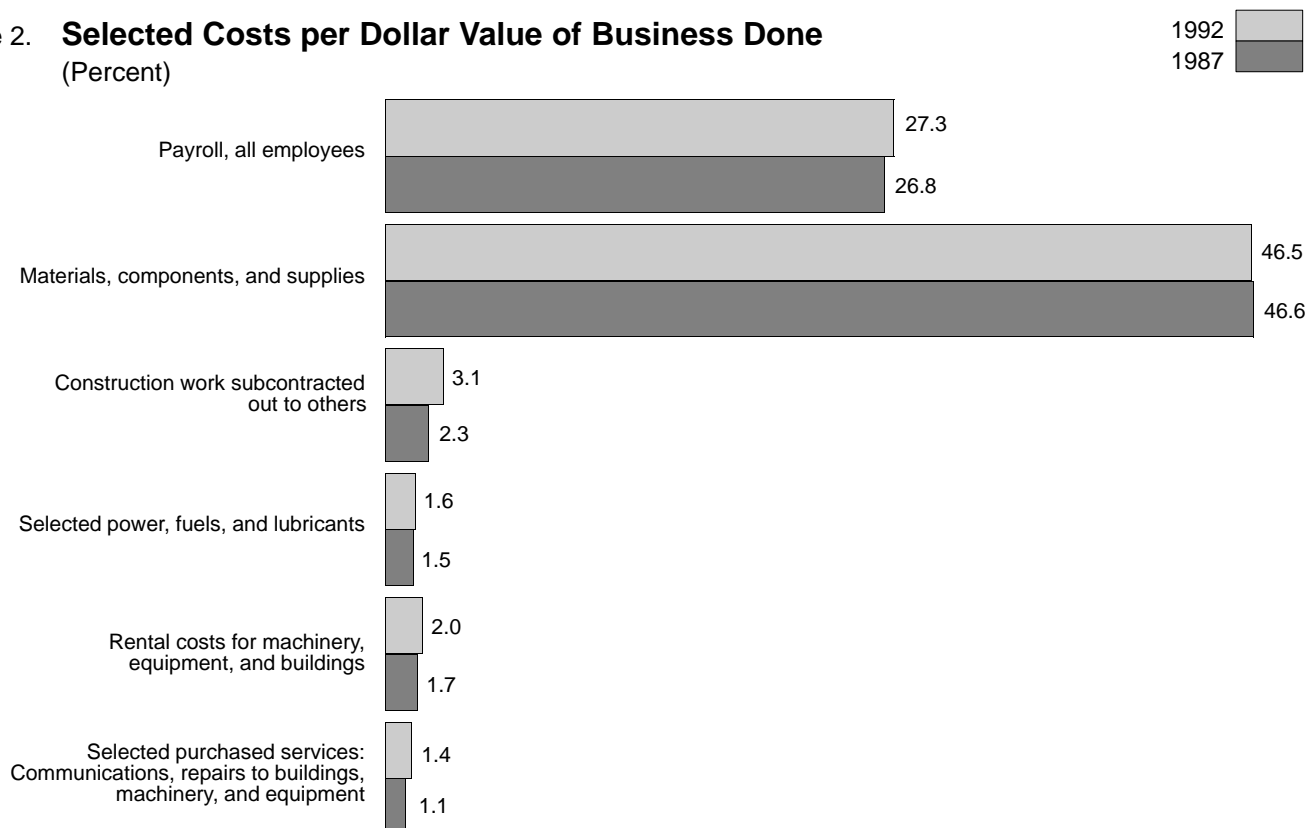


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	4 590	32 067	21 352	795 946	494 657	2 724 467	2 634 085	1 423 934	1 399 569
Alabama -----	42	582	445	9 892	6 461	35 864	(D)	18 479	(D)
Alaska -----	5	55	32	1 628	848	4 015	(D)	2 029	2 821
Arizona -----	112	529	360	11 677	7 221	44 188	43 915	21 614	24 648
Arkansas -----	25	143	95	3 440	1 760	9 707	9 612	5 736	6 136
California -----	709	4 114	2 691	118 872	73 190	414 964	406 991	219 145	215 934
Colorado -----	71	626	451	15 654	10 922	46 982	46 231	23 211	27 406
Connecticut -----	75	371	221	9 451	5 288	34 965	31 848	18 432	14 648
Delaware -----	32	121	78	2 681	1 638	8 603	8 510	4 693	(D)
District of Columbia -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	303	1 942	1 285	38 192	23 128	138 718	134 495	69 276	72 669
Georgia -----	134	1 097	763	24 702	16 401	89 124	87 330	43 293	47 327
Hawaii -----	42	422	273	12 008	8 039	47 849	46 679	26 144	22 508
Idaho -----	20	132	86	2 350	1 489	9 865	9 817	5 341	5 526
Illinois -----	173	1 483	921	44 112	26 635	136 430	132 329	75 579	65 091
Indiana -----	85	695	445	17 319	10 387	58 166	57 258	29 528	31 931
Iowa -----	21	187	116	4 535	2 840	16 623	16 212	8 956	9 304
Kansas -----	35	267	166	6 163	3 890	19 734	19 590	10 279	11 030
Kentucky -----	64	451	326	9 529	6 449	33 477	32 982	16 729	19 030
Louisiana -----	52	394	264	6 928	4 351	22 783	22 427	11 440	13 893
Maine -----	11	38	23	799	400	3 338	3 329	1 394	2 380
Maryland -----	106	877	547	23 080	13 380	72 213	69 873	35 398	35 105
Massachusetts -----	107	536	342	12 683	7 184	42 370	41 327	25 107	19 592
Michigan -----	143	969	628	25 501	16 337	89 809	84 441	44 240	48 336
Minnesota -----	70	693	449	18 065	11 479	72 670	64 995	32 779	38 781
Mississippi -----	27	156	89	2 170	1 379	8 493	8 440	3 806	5 375
Missouri -----	66	400	266	10 915	6 962	38 868	38 515	19 018	20 359
Montana -----	9	88	54	1 830	1 153	9 124	9 069	4 520	5 138
Nebraska -----	23	153	96	2 918	1 767	9 771	9 678	5 585	5 429
Nevada -----	47	410	276	10 158	6 836	38 056	37 864	21 389	19 244
New Hampshire -----	19	101	64	2 412	1 498	*8 635	(D)	*6 089	(D)
New Jersey -----	156	1 063	737	30 393	19 832	99 102	94 848	54 188	44 390
New Mexico -----	31	101	79	2 152	1 468	8 938	(D)	4 491	4 457
New York -----	341	2 234	1 546	58 471	37 841	190 450	182 022	110 023	82 846
North Carolina -----	101	887	593	20 241	12 196	63 198	59 655	32 097	32 743
North Dakota -----	6	52	33	(D)	562	3 411	(D)	(D)	2 153
Ohio -----	226	1 329	867	34 551	22 549	117 153	111 616	60 336	56 370
Oklahoma -----	53	328	227	6 363	3 671	19 427	19 291	10 439	11 513
Oregon -----	64	394	238	10 089	5 916	39 906	(D)	(D)	24 543
Pennsylvania -----	164	1 463	989	39 425	23 816	142 877	136 575	79 231	68 217
Rhode Island -----	23	135	95	5 693	2 711	29 904	(D)	(D)	11 519
South Carolina -----	46	403	259	8 430	5 100	25 001	24 634	11 898	15 713
South Dakota -----	20	212	126	3 913	2 088	14 551	(D)	7 038	7 625
Tennessee -----	65	467	317	9 830	5 593	30 611	30 329	13 948	18 730
Texas -----	335	2 205	1 548	48 213	31 323	150 407	148 028	75 516	84 049
Utah -----	18	99	66	2 155	1 506	10 059	(D)	(D)	6 787
Vermont -----	*15	*64	*50	*1 299	*875	*4 643	(D)	(D)	*2 975
Virginia -----	95	760	501	16 725	10 423	56 209	55 455	31 667	29 783
Washington -----	120	891	620	23 117	14 384	82 112	81 805	41 862	44 538
West Virginia -----	16	95	67	2 123	1 396	7 013	6 843	3 863	3 874
Wisconsin -----	59	786	497	20 960	11 278	59 981	58 846	41 712	28 544
Wyoming -----	3	(D)	(D)	412	(D)	(D)	(D)	1 060	(D)

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
90 382	1 908 755	58 274	23 581	291 378	40 511	3 222 472	1 700 519	1	1	5	U.S.
(D)	26 792	476	165	2 341	643	47 952	24 759	4	(D)	34	AL
(D)	3 573	208	(D)	513	76	(D)	3 237	(Z)	(D)	(D)	AK
273	26 512	872	*184	2 385	877	65 345	30 053	13	13	47	AZ
95	8 102	239	120	835	207	13 755	7 688	5	9	15	AR
7 973	319 098	11 922	3 416	43 741	6 474	572 626	307 226	4	3	17	CA
750	34 379	1 258	787	6 484	630	40 592	23 637	8	7	38	CO
3 117	23 924	579	575	4 838	620	56 707	30 506	7	7	4	CT
*94	(S)	*158	(D)	126	(D)	(D)	(D)	29	36	(D)	DE
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	DC
*4 223	93 399	3 346	1 022	13 877	2 755	187 051	99 824	6	6	24	FL
1 794	55 760	1 041	683	7 816	1 237	101 860	49 726	10	9	39	GA
*1 170	30 758	1 199	415	3 848	236	22 510	13 149	13	14	39	HI
(S)	5 256	108	70	568	84	6 439	3 198	9	12	30	ID
4 102	100 313	3 101	1 067	12 662	1 385	107 588	60 702	6	4	20	IL
908	(S)	977	436	5 204	652	55 749	27 683	10	8	26	IN
410	7 748	254	298	2 610	226	(D)	8 381	11	13	6	IA
144	15 061	308	*175	2 089	463	29 613	17 435	7	7	59	KS
*495	25 963	381	450	3 937	439	33 536	18 591	10	11	37	KY
*356	13 283	238	*120	1 509	565	38 815	20 337	13	11	44	LA
9	2 422	170	(D)	(D)	37	3 692	1 496	(Z)	(Z)	(D)	ME
2 340	47 154	1 854	234	7 852	944	77 111	38 035	6	5	29	MD
1 044	26 266	827	*214	4 457	1 453	123 305	61 537	8	7	51	MA
5 368	62 581	1 649	821	10 429	1 324	119 227	65 421	7	5	26	MI
7 675	58 190	2 071	1 266	11 806	787	68 784	37 772	3	12	12	MN
(S)	3 544	(S)	71	*2 442	74	(D)	3 277	16	10	38	MS
353	28 355	421	554	3 381	620	54 134	28 267	10	14	20	MO
56	(S)	136	24	510	75	(D)	2 848	17	12	18	MT
93	7 236	219	275	1 078	177	13 363	6 942	2	2	(Z)	NE
192	28 665	906	*273	2 379	366	32 397	19 043	8	10	45	NV
(D)	3 571	(S)	(D)	1 251	154	12 531	6 117	30	(D)	(D)	NH
4 253	71 653	2 485	672	13 867	1 641	159 384	82 756	8	6	29	NJ
(D)	6 316	215	55	1 490	131	8 543	5 118	15	(D)	(Z)	NM
8 428	124 489	3 522	*1 208	20 757	2 471	202 792	107 817	5	5	42	NY
3 543	43 522	1 147	445	8 555	1 116	72 739	39 623	6	7	30	NC
(D)	2 406	119	(D)	296	56	4 419	2 154	3	(D)	(D)	ND
5 537	92 810	2 083	1 586	11 101	1 290	103 405	53 224	7	8	37	OH
136	11 784	338	260	3 509	349	19 919	10 506	5	5	31	OK
(D)	29 029	1 373	202	3 628	425	52 964	24 615	13	(D)	25	OR
6 301	85 822	2 413	788	13 603	1 362	114 932	61 024	6	7	22	PA
(D)	24 834	280	108	2 104	207	14 657	8 136	9	(D)	36	RI
367	17 411	442	(S)	2 760	585	37 242	19 173	6	7	(S)	SC
(D)	9 539	(D)	(D)	1 822	121	6 094	3 117	7	(D)	(D)	SD
283	21 035	621	298	2 846	609	45 535	24 827	7	6	25	TN
2 378	105 256	2 910	1 918	18 408	3 234	202 590	108 834	5	6	17	TX
(D)	8 051	95	178	1 450	91	5 540	3 288	10	(D)	15	UT
(D)	(D)	80	(D)	289	99	14 592	5 638	42	(D)	(D)	VT
754	35 131	1 112	264	6 422	1 061	94 576	42 846	9	11	17	VA
308	50 829	2 112	556	7 788	1 022	75 468	38 252	5	5	25	WA
170	4 833	77	*87	724	82	5 590	3 085	4	4	71	WV
1 135	44 659	1 409	750	8 024	816	55 149	33 857	5	5	25	WI
(D)	(D)	(D)	(D)	716	57	(D)	2 014	(D)	(D)	(D)	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	4 590	4 636	3 797	3 283	2	2	2	3
Proprietors and working partners	1 138	748	965	1 291	5	9	7	6
All employees**	32 067	40 511	35 843	26 125	1	1	2	1
Construction workers:								
March	20 682	27 811	25 113	18 056	1	2	1	1
May	21 064	28 574	25 509	18 436	1	2	2	1
August	22 058	29 429	26 737	19 222	1	2	2	1
November	21 603	29 108	27 075	21 113	1	2	2	1
Average	21 352	28 730	26 402	19 335	1	2	2	1
Other employees:								
March	10 984	11 807	9 427	6 484	2	2	2	1
May	10 566	11 653	(NA)	(NA)	2	2	(NA)	(NA)
August	10 552	11 712	(NA)	(NA)	2	2	(NA)	(NA)
November	10 758	11 950	(NA)	(NA)	2	2	(NA)	(NA)
Average	10 715	11 780	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	795 946	919 463	696 463	316 974	1	1	1	1
Payroll, construction workers	494 657	606 646	492 590	228 741	1	1	1	1
Payroll, other employees	301 288	312 816	203 873	88 233	1	1	1	1
First-quarter payroll, all employees	188 004	210 486	161 160	70 733	1	1	1	1
Fringe benefits, all employees	189 996	195 612	134 243	55 440	2	1	1	1
Legally required expenditures	131 297	136 097	94 983	31 807	2	1	1	1
Voluntary expenditures	58 699	59 515	39 260	23 633	2	2	1	1
Dollar value of business done	2 913 885	3 433 251	2 610 344	1 152 811	1	1	1	1
Value of construction work	2 724 467	3 222 472	2 422 274	1 006 566	1	1	1	1
Value of construction work subcontracted in from others	1 908 755	1 767 757	1 325 051	588 081	2	2	2	1
Other business receipts	189 418	210 779	188 069	146 245	3	3	2	1
Net value of construction work†	2 634 085	3 142 354	2 362 527	994 651	1	1	1	1
Value added††	1 423 934	1 700 519	1 297 853	570 736	1	1	1	1
Selected costs	1 489 951	1 732 732	1 312 491	582 076	1	1	1	1
Materials, components, and supplies	1 354 022	1 599 680	1 209 558	549 919	1	1	1	1
Construction work subcontracted out to others	90 382	80 118	59 747	11 916	4	4	5	6
Selected power, fuels, and lubricants	45 547	52 933	43 185	20 242	2	2	2	2
Electricity	12 011	12 799	8 604	3 641	3	3	3	2
Natural and manufactured gas	2 996	3 600	2 848	1 513	5	3	4	2
Gasoline and diesel fuel	29 189	34 614	29 100	13 469	2	2	2	2
On highway use	27 663	32 404	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use	1 525	2 210	(NA)	(NA)	5	4	(NA)	(NA)
Other, including lubricating oils and greases	1 351	1 917	2 631	1 620	7	4	5	3
Rental cost for machinery, equipment, and buildings	58 274	56 999	28 823	9 621	3	2	2	2
For machinery and equipment	13 438	12 836	7 923	1 967	4	3	3	4
For buildings	44 837	44 163	20 900	7 654	3	3	3	2
Selected purchased services	41 748	38 591	28 258	16 018	3	2	3	2
Communication services	25 786	23 728	17 637	9 168	3	2	3	2
Repairs to buildings and other structures	3 142	3 885	2 661	1 447	7	4	4	4
Repairs to machinery and equipment	12 821	10 976	7 959	5 403	4	3	3	2
Ownership of construction projects:								
Value of construction work	2 724 467	3 222 472	2 422 274	1 006 566	1	1	1	1
Government owned	525 607	323 357	180 631	99 997	4	5	10	2
Federal	117 266	82 092	(NA)	(NA)	7	5	(NA)	(NA)
State and local	408 341	241 265	(NA)	(NA)	4	6	(NA)	(NA)
Privately owned	2 198 859	2 899 114	2 241 643	906 570	2	2	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	278 914	243 227	3	3
Capital expenditures, other than land -----	23 581	37 209	5	4
New -----	18 265	28 608	6	4
Used -----	5 316	8 601	11	10
Retirements and disposition of depreciable assets -----	11 117	9 715	9	8
End-of-year gross book value of depreciable assets -----	291 378	270 720	3	3
Depreciation charges during year -----	29 986	34 115	3	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	65 329	87 953	7	6
Capital expenditures, other than land -----	1 584	6 493	8	8
New buildings and other structures -----	1 009	3 658	12	10
Used buildings and other structures -----	575	2 834	11	12
Retirements and disposition of depreciable assets -----	1 448	1 419	33	11
End-of-year gross book value of depreciable assets -----	65 465	93 027	7	6
Depreciation charges during year -----	4 577	8 308	9	8
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	213 586	155 274	3	3
Capital expenditures, other than land -----	21 997	30 715	6	5
New machinery and equipment, including automobiles and trucks -----	17 256	24 949	6	4
New automobiles and trucks, intended primarily for highway use -----	8 727	16 059	7	5
Used machinery and equipment, including automobiles and trucks -----	4 741	5 766	12	14
Retirements and disposition of depreciable assets -----	9 669	8 296	8	9
End-of-year gross book value of depreciable assets -----	225 913	177 693	3	3
Depreciation charges during year -----	25 409	25 806	3	3

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	4 590	2
Value of construction work	2 724 467	1
Establishments with inventories:		
Number	2 805	2
Value of construction work	2 023 220	1
Inventories ¹ :		
End of 1992, materials and supplies	108 566	3
End of 1991, materials and supplies	111 717	3
Establishments with no inventories:		
Number	514	7
Value of construction work	248 751	5
Establishments not reporting:		
Number	1 271	4
Value of construction work	452 496	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments -----	4 590	2 451	1 182	674	240	33	11	—	—	—
All employees** -----	32 067	5 298	7 555	8 864	6 723	2 198	1 429	—	—	—
Payroll, all employees -----	795 946	95 712	174 850	226 178	190 357	70 702	38 147	—	—	—
Dollar value of business done -----	2 913 885	482 198	611 634	794 739	621 421	260 059	143 835	—	—	—
Value of construction work -----	2 724 467	454 126	567 660	746 408	579 127	243 294	133 853	—	—	—
Net value of construction work† -----	2 634 085	433 415	554 779	731 842	559 562	229 358	125 128	—	—	—
Value added†† -----	1 423 934	223 048	305 113	384 571	310 659	129 628	70 916	—	—	—
Cost of materials, components, supplies, and fuels -----	1 399 569	238 440	293 641	395 602	291 198	116 495	64 194	—	—	—
Cost of construction work subcontracted out to others -----	90 382	20 710	12 881	14 566	19 565	13 936	8 725	—	—	—
Rental cost for machinery, equipment, and buildings -----	58 274	10 911	12 548	14 419	12 131	4 336	3 929	—	—	—
Capital expenditures, other than land -----	23 581	5 104	5 674	5 835	4 368	1 100	1 500	—	—	—
End-of-year gross book value of depreciable assets -----	291 378	57 455	55 958	76 079	59 871	24 887	17 128	—	—	—
1987										
All employees** -----	40 511	(S)	7 688	10 706	10 622	4 560	2 130	—	—	—
Value of construction work -----	3 222 472	(S)	541 268	783 266	953 020	454 678	167 829	—	—	—
Value added†† -----	1 700 519	(S)	292 506	424 637	501 178	222 538	92 069	—	—	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	1	5	5	3	2	(Z)	(Z)	—	—	—
Net value of construction work† -----	1	5	5	3	2	(Z)	(Z)	—	—	—
Capital expenditures, other than land -----	5	14	16	7	5	(Z)	(Z)	—	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	4 590	(S)	(S)	489	1 192	1 126	780	542	139	36	14
All employees** -----	32 067	(S)	(S)	731	3 280	5 265	6 671	8 399	3 816	2 461	1 230
Payroll, all employees -----	795 946	(S)	(S)	8 104	49 684	107 244	154 089	228 187	126 320	74 430	45 998
Dollar value of business done -----	2 913 885	(S)	(S)	35 599	205 163	396 668	533 559	794 049	466 035	259 037	215 891
Value of construction work -----	2 724 467	(S)	(S)	33 967	194 375	363 689	491 161	744 242	443 953	239 077	206 251
Net value of construction work† -----	2 634 085	(S)	(S)	33 149	191 786	358 349	483 941	727 558	423 251	225 484	182 924
Value added†† -----	1 423 934	(S)	(S)	17 075	101 230	199 215	274 946	380 656	219 833	129 420	97 479
Cost of materials, components, supplies, and fuels -----	1 399 569	(S)	(S)	17 705	101 344	192 113	251 393	396 710	225 499	116 024	95 085
Cost of construction work subcontracted out to others -----	90 382	(S)	(S)	818	2 589	5 340	7 220	16 683	20 703	13 593	23 327
Rental cost for machinery, equipment, and buildings -----	58 274	(S)	(S)	629	5 048	9 330	10 913	14 499	8 555	4 190	4 988
Capital expenditures, other than land -----	23 581	(S)	(S)	(S)	2 026	4 939	4 835	5 348	3 409	950	1 639
End-of-year gross book value of depreciable assets -----	291 378	(S)	(S)	4 378	24 565	48 653	57 179	73 743	36 355	27 392	18 001
1987											
All employees** -----	40 511	(S)	(S)	(S)	(S)	5 078	7 520	9 455	6 529	4 140	2 454
Value of construction work -----	3 222 472	(S)	(S)	(S)	(S)	302 943	495 605	782 362	617 516	452 199	320 857
Value added†† -----	1 700 519	(S)	(S)	(S)	(S)	164 569	274 809	415 447	331 844	234 659	144 616
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	12	7	6	5	3	2	(Z)	(Z)
Net value of construction work† -----	1	(S)	(S)	10	6	6	5	3	3	(Z)	(Z)
Capital expenditures, other than land -----	5	(S)	(S)	(S)	16	16	16	7	4	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	2 724 467	1 508 319	653 721	522 632	1	2	2	3
Building construction	2 682 902	1 507 165	653 471	522 266	1	2	2	3
Single-family houses	523 926	239 409	132 077	152 440	3	4	5	4
Single-family houses, detached	445 197	201 960	113 706	129 531	3	4	5	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	78 729	37 450	18 370	22 909	8	12	13	9
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	99 138	33 583	19 472	46 083	9	22	8	6
Other residential buildings, including hotels, motels, and tourist cabins	58 791	33 465	12 893	12 432	6	7	12	6
Office buildings	586 643	395 678	116 227	74 737	2	3	4	4
Other commercial buildings such as stores, restaurants, and automobile service stations	761 985	438 989	184 769	138 227	2	3	4	4
Industrial buildings and warehouses	145 755	87 070	29 664	29 022	4	4	6	6
Industrial buildings	111 353	65 200	23 985	22 168	4	5	7	6
Warehouses	34 402	21 870	5 679	6 853	7	8	10	8
Religious buildings	63 877	30 874	17 318	15 684	6	5	11	19
Educational buildings	210 577	110 349	72 096	28 133	4	4	7	6
Hospitals and institutional buildings	198 390	120 907	56 540	20 943	4	6	6	5
Amusement, social, and recreational buildings, indoors	18 071	11 785	4 000	2 285	5	7	7	10
Other nonresidential buildings	15 750	5 055	8 414	(S)	7	9	10	(S)
Nonbuilding construction	1 770	1 154	250	366	13	9	39	15
Construction work, n.s.k.	39 795	(NA)	(NA)	(NA)	11	(NA)	(NA)	(NA)
1987								
Value of construction work	3 222 472	1 936 156	455 234	472 599	1	1	3	4
Building construction	2 821 996	1 925 535	446 456	450 004	1	1	3	5
Single-family houses	396 351	198 989	87 379	109 983	3	4	8	6
Single-family houses, detached	342 867	172 598	74 122	96 146	4	4	9	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	53 484	26 391	13 256	13 837	5	5	15	8
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	84 516	37 806	19 616	27 092	6	6	22	7
Other residential buildings, including hotels, motels, and tourist cabins	163 926	110 547	30 025	23 353	4	3	13	7
Office buildings	927 580	758 545	86 042	82 993	1	1	2	3
Other commercial buildings such as stores, restaurants, and automobile service stations	700 283	461 417	107 165	131 700	4	2	5	15
Industrial buildings and warehouses	206 157	152 023	31 627	22 506	3	3	5	5
Industrial buildings	150 395	104 410	27 239	18 745	3	4	6	6
Warehouses	55 761	47 612	4 387	3 761	6	7	6	6
Religious buildings	49 457	27 539	11 461	10 456	6	4	14	8
Educational buildings	131 465	80 909	31 219	19 337	3	3	7	6
Hospitals and institutional buildings	119 812	72 972	31 397	15 442	3	4	4	6
Amusement, social, and recreational buildings, indoors	15 135	8 364	3 941	2 829	5	6	6	8
Other nonresidential buildings	27 314	16 424	6 584	4 313	10	10	13	21
Nonbuilding construction	41 995	10 621	8 778	22 595	13	11	31	19
Construction work, n.s.k.	358 483	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
All establishments -----	4 590	32 067	795 946	2 724 467	1 261 255	2 634 085	1 423 934	90 382	1	1	4
Establishments not specializing by type -----	1 703	13 997	357 515	1 169 003	(NA)	1 141 896	637 385	27 107	2	2	6
Establishments specializing 51 percent or more -----	2 887	18 070	438 431	1 555 464	1 261 255	1 492 189	786 549	63 275	2	2	5
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	1 075	4 491	95 015	329 346	269 216	322 424	177 477	6 922	5	5	26
Establishments with —											
100 percent specialization -----	325	1 108	21 507	82 879	82 879	81 804	40 666	1 075	10	10	33
90 to 99 percent specialization -----	139	711	15 966	55 756	51 931	54 034	30 390	1 722	12	12	4
80 to 89 percent specialization -----	124	641	15 903	51 016	41 892	50 830	27 528	187	13	11	12
70 to 79 percent specialization -----	201	885	19 437	66 136	48 170	62 858	37 166	*3 279	11	11	53
60 to 69 percent specialization -----	216	914	18 261	59 181	36 512	58 870	34 676	310	12	13	27
51 to 59 percent specialization -----	(S)	233	3 942	14 377	7 832	14 028	7 051	348	26	25	22
OFFICE BUILDINGS											
All establishments specializing in type -----	243	3 343	104 867	389 954	307 879	366 206	185 495	23 748	4	3	4
Establishments with —											
100 percent specialization -----	75	809	27 452	94 287	94 287	92 282	51 569	2 005	9	9	17
90 to 99 percent specialization -----	19	353	12 349	43 935	40 459	42 326	20 097	1 609	7	9	29
80 to 89 percent specialization -----	25	458	15 709	57 138	45 962	52 955	27 755	4 183	11	7	1
70 to 79 percent specialization -----	38	656	18 517	78 698	57 667	68 292	28 692	10 406	10	6	2
60 to 69 percent specialization -----	62	823	23 353	81 154	50 389	77 015	38 969	4 139	8	7	7
51 to 59 percent specialization -----	24	244	7 488	34 742	19 115	33 335	18 414	1 407	9	12	36
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	862	6 715	159 401	545 132	454 165	522 996	286 147	22 136	4	3	3
Establishments with —											
100 percent specialization -----	283	2 322	56 943	207 599	207 599	192 825	102 524	14 774	6	5	5
90 to 99 percent specialization -----	98	750	18 221	59 559	55 308	58 500	31 582	1 058	12	12	10
80 to 89 percent specialization -----	125	878	19 980	78 887	64 241	77 376	42 180	1 511	11	12	6
70 to 79 percent specialization -----	141	1 094	23 779	75 067	53 721	71 817	38 847	3 249	11	11	16
60 to 69 percent specialization -----	160	1 134	25 508	77 642	47 550	76 813	46 856	829	11	9	14
51 to 59 percent specialization -----	55	537	14 970	46 379	25 746	45 664	24 156	715	10	10	5
EDUCATIONAL BUILDINGS											
All establishments specializing in type -----	74	627	15 617	63 508	44 672	60 679	27 554	*2 829	14	14	40
Establishments with —											
100 percent specialization -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
90 to 99 percent specialization -----	(S)	46	(D)	(D)	(D)	(D)	(D)	(D)	33	(D)	(D)
80 to 89 percent specialization -----	9	(D)	1 173	4 783	3 858	(D)	2 526	(D)	(D)	15	(D)
70 to 79 percent specialization -----	25	326	8 645	30 423	22 298	29 866	15 369	557	17	15	10
60 to 69 percent specialization -----	*22	193	4 123	21 942	13 468	20 080	7 244	*1 862	35	35	61
51 to 59 percent specialization -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	4 590	21 352	20 682	21 064	22 058	21 603	2	1	1	1	1	1
Alabama	42	445	415	449	445	470	12	4	6	4	4	3
Alaska	5	32	28	30	34	35	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Arizona	112	360	292	339	401	408	13	14	11	13	18	16
Arkansas	25	95	99	97	96	89	(Z)	2	5	2	6	7
California	709	2 691	2 767	2 697	2 734	2 565	4	4	4	4	4	5
Colorado	71	451	419	431	430	524	9	7	6	8	8	7
Connecticut	75	221	212	216	220	235	13	6	6	6	6	7
Delaware	32	78	53	78	83	98	34	31	22	31	31	40
District of Columbia	2	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
Florida	303	1 285	1 244	1 240	1 311	1 346	8	6	6	6	7	7
Georgia	134	763	730	738	768	815	12	10	9	10	10	11
Hawaii	42	273	312	258	255	267	15	11	10	13	13	13
Idaho	20	86	86	77	89	94	14	8	10	7	6	7
Illinois	173	921	909	911	944	921	9	7	8	7	7	7
Indiana	85	445	419	424	487	449	11	8	8	7	9	10
Iowa	21	116	115	116	112	123	18	14	14	14	15	16
Kansas	35	166	168	164	163	169	6	9	9	12	8	10
Kentucky	64	326	316	315	327	348	9	10	9	9	9	12
Louisiana	52	264	245	277	271	262	16	13	12	15	15	13
Maine	11	23	22	21	23	25	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Maryland	106	547	530	531	552	574	11	6	8	6	6	5
Massachusetts	107	342	364	326	351	327	14	8	8	9	8	9
Michigan	143	628	593	624	636	661	10	7	7	7	6	7
Minnesota	70	449	449	457	482	410	13	3	4	3	4	4
Mississippi	27	89	86	91	89	91	3	15	13	15	14	16
Missouri	66	266	252	241	278	292	18	9	9	9	10	9
Montana	9	54	51	51	56	59	21	16	15	15	17	16
Nebraska	23	96	84	83	111	106	(Z)	(Z)	(Z)	3	2	(Z)
Nevada	47	276	209	288	297	311	5	9	7	8	9	9
New Hampshire	19	64	54	54	67	80	39	23	14	14	22	37
New Jersey	156	737	742	705	762	737	9	9	8	10	8	10
New Mexico	31	79	75	80	82	80	27	18	19	18	17	18
New York	341	1 546	1 501	1 558	1 657	1 469	8	5	4	5	5	5
North Carolina	101	593	586	593	619	574	6	7	8	7	7	8
North Dakota	6	33	28	37	43	26	13	5	(Z)	(Z)	12	(Z)
Ohio	226	867	783	835	941	908	8	8	7	8	10	8
Oklahoma	53	227	212	239	247	209	14	4	4	3	4	3
Oregon	64	238	241	221	253	237	14	12	11	13	11	12
Pennsylvania	164	989	986	973	1 023	973	11	7	7	7	8	7
Rhode Island	23	95	94	100	94	93	13	12	7	10	15	15
South Carolina	46	259	257	257	262	259	19	6	6	6	6	6
South Dakota	20	126	114	126	137	128	(Z)	8	6	11	5	5
Tennessee	65	317	312	295	302	361	7	7	7	8	8	7
Texas	335	1 548	1 466	1 593	1 586	1 545	6	6	6	6	6	5
Utah	18	66	64	69	68	61	8	10	12	12	10	9
Vermont	*15	*50	*43	*41	*62	*54	53	45	47	49	43	42
Virginia	95	501	495	516	520	472	17	9	10	7	9	12
Washington	120	620	583	592	675	629	8	6	6	5	6	7
West Virginia	16	67	66	64	74	65	(Z)	6	6	6	5	6
Wisconsin	59	497	462	499	496	529	13	6	7	5	5	6
Wyoming	3	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	2 724 467	4 579	2 528 782	1 184	195 684	3 222 472	-15.5	1	1	5
Alabama -----	24 444	42	24 280	*17	164	37 844	-35.4	5	6	38
Alaska -----	4 044	5	4 015	(S)	(S)	5 537	-27.0	1	(Z)	(S)
Arizona -----	43 100	112	43 100	—	—	65 899	-34.6	14	14	—
Arkansas -----	9 976	25	8 826	4	*1 149	13 811	-27.8	11	9	64
California -----	415 044	709	411 349	27	3 695	572 941	-27.6	3	3	33
Colorado -----	56 632	71	(D)	4	(D)	41 056	37.9	5	(D)	(D)
Connecticut -----	35 409	74	33 938	*17	1 471	51 042	-30.6	7	8	3
Delaware -----	13 558	32	8 304	28	5 254	7 738	75.2	22	35	13
District of Columbia -----	12 768	2	(D)	57	(D)	12 676	.7	10	(D)	(D)
Florida -----	153 060	303	138 659	43	14 401	193 870	-21.1	5	6	20
Georgia -----	80 232	134	77 693	42	2 539	97 084	-17.4	9	10	11
Hawaii -----	(D)	42	(D)	2	(D)	22 543	(D)	(D)	(D)	(D)
Idaho -----	9 857	(S)	8 825	*15	*1 032	6 330	55.7	12	12	43
Illinois -----	152 499	173	130 653	79	21 846	112 747	35.3	6	4	30
Indiana -----	59 711	85	55 589	51	4 122	55 912	6.8	8	8	12
Iowa -----	20 015	21	16 057	16	3 958	15 294	30.9	11	13	4
Kansas -----	22 149	35	18 790	20	3 359	32 558	-32.0	7	7	25
Kentucky -----	42 282	64	30 245	44	12 038	34 944	21.0	9	12	3
Louisiana -----	23 736	52	22 783	11	952	35 127	-32.4	11	11	24
Maine -----	3 125	11	3 125	—	—	3 750	-16.7	(Z)	(Z)	—
Maryland -----	55 034	106	50 052	35	4 982	62 987	-12.6	6	6	9
Massachusetts -----	48 047	107	40 772	26	*7 274	141 311	-66.0	10	8	48
Michigan -----	94 344	143	89 451	32	4 893	120 624	-21.8	5	5	9
Minnesota -----	56 265	70	54 215	11	*2 050	67 945	-17.2	9	9	41
Mississippi -----	9 157	(S)	8 301	12	856	7 064	29.6	9	10	24
Missouri -----	36 658	66	34 552	9	2 106	47 738	-23.2	13	14	(Z)
Montana -----	8 344	9	(D)	3	(D)	4 494	85.7	13	(D)	(D)
Nebraska -----	9 981	(S)	(D)	8	(D)	17 038	-41.4	2	(D)	(D)
Nevada -----	42 234	47	(D)	3	(D)	34 041	24.1	9	(D)	(D)
New Hampshire -----	4 924	19	4 653	*14	270	12 035	-59.1	8	8	16
New Jersey -----	107 747	155	94 433	69	13 315	158 834	-32.2	5	6	13
New Mexico -----	9 050	31	(D)	1	(D)	10 522	-14.0	11	(D)	(D)
New York -----	196 686	341	187 758	88	8 928	205 774	-4.4	5	5	14
North Carolina -----	66 231	101	60 990	35	5 241	75 503	-12.3	7	7	32
North Dakota -----	4 017	6	3 349	*10	669	4 337	-7.4	2	2	9
Ohio -----	92 966	226	89 191	33	3 775	102 423	-9.2	6	6	15
Oklahoma -----	18 437	52	17 792	3	645	18 228	1.1	7	7	(Z)
Oregon -----	40 246	64	38 595	*15	1 651	53 416	-24.7	9	9	13
Pennsylvania -----	134 031	156	127 502	62	6 529	108 599	23.4	6	7	6
Rhode Island -----	13 861	23	13 097	16	764	14 542	-4.7	16	16	6
South Carolina -----	27 119	46	23 497	55	3 622	38 078	-28.8	6	7	12
South Dakota -----	(D)	20	(D)	3	(D)	5 325	(D)	(D)	(D)	(D)
Tennessee -----	31 572	65	29 033	18	2 539	45 708	-30.9	6	7	2
Texas -----	147 112	335	146 633	11	479	190 824	-22.9	5	5	12
Utah -----	9 100	18	9 100	—	—	5 442	67.2	13	13	—
Vermont -----	*4 571	*15	(D)	3	(D)	4 313	6.0	45	(D)	(D)
Virginia -----	62 888	95	51 679	60	11 209	111 248	-43.5	10	11	14
Washington -----	81 926	120	80 891	11	1 034	75 347	8.7	5	5	23
West Virginia -----	8 105	16	6 696	36	1 409	5 962	35.9	7	4	33
Wisconsin -----	54 613	59	53 720	15	893	51 161	6.7	6	6	21
Wyoming -----	2 127	3	1 703	8	424	2 883	-26.2	1	(Z)	3

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business -----	2 913 885	3 433 251	1	1
SPECIAL TRADE CONTRACTORS				
Curtain wall installation contractor -----	95 821	(NA)	3	(NA)
Glass and glazing contractor -----	2 558 880	2 956 658	1	1
Other construction activities -----	69 558	160 215	7	(NA)
OTHER BUSINESS ACTIVITIES				
Retail trade -----	119 489	102 179	4	4
Wholesale trade -----	27 221	46 570	5	3
Other business activities -----	42 864	54 402	6	(NA)
Kind of business activity, n.s.k. -----	51	113 227	(Z)	10

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	7.0	8.7	1
Number of construction workers	4.7	6.2	1
Number of all other employees	2.3	2.5	1
Payroll, all employees \$1,000 ..	173.4	198.3	1
Payroll, construction workers do ..	107.8	130.9	1
Payroll, other employees do ..	65.6	67.5	1
Dollar value of business done do ..	634.8	740.6	1
Value of construction work do ..	593.5	695.1	1
Cost of materials, components, supplies, and fuels do ..	304.9	356.5	1
Construction work subcontracted to others do ..	19.7	17.3	4
Rental cost for machinery, equipment, and buildings do ..	12.7	12.3	3
Capital expenditures, other than land do ..	5.1	8.0	6
Gross book value of depreciable assets do ..	63.5	58.4	3
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	24.8	22.7	1
Dollar value of business done do ..	90.9	84.7	1
Value added†† do ..	44.4	42.0	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	23.2	21.1	1
Value of construction work do ..	127.6	112.2	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	28.1	26.6	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.292	.285	1
Cost of materials, components, supplies, and fuels do ..	.514	.513	(Z)
Cost of construction work subcontracted out to others do ..	.033	.025	3
Value of construction work subcontracted in from others do ..	.701	.549	2
Rental cost for machinery, equipment, and buildings do ..	.021	.018	3

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	7.0	24.8	127.6	.292	.514	.033	.701	.021
Alabama -----	13.8	17.0	80.6	.276	(D)	(D)	.747	.013
Alaska -----	11.0	29.6	125.5	.405	.703	(D)	.890	.052
Arizona -----	4.7	22.1	122.7	.264	.558	.006	.600	.020
Arkansas -----	5.8	24.1	102.2	.354	.632	.010	.835	.025
California -----	5.8	28.9	154.2	.286	.520	.019	.769	.029
Colorado -----	8.8	25.0	104.2	.333	.583	.016	.732	.027
Connecticut -----	5.0	25.5	158.2	.270	.419	.089	.684	.017
Delaware -----	3.8	22.2	110.3	.312	(D)	*.011	(S)	*.018
District of Columbia -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	6.4	19.7	108.0	.275	.524	*.030	.673	.024
Georgia -----	8.2	22.5	116.8	.277	.531	.020	.626	.012
Hawaii -----	10.0	28.5	175.3	.251	.470	*.024	.643	.025
Idaho -----	6.7	17.8	114.7	.238	.560	(S)	.533	.011
Illinois -----	8.6	29.7	148.1	.323	.477	.030	.735	.023
Indiana -----	8.2	24.9	130.7	.298	.549	.016	(S)	.017
Iowa -----	8.9	24.3	143.3	.273	.560	.025	.466	.015
Kansas -----	7.5	23.1	118.9	.312	.559	.007	.763	.016
Kentucky -----	7.0	21.1	102.7	.285	.568	.015	.776	.011
Louisiana -----	7.6	17.6	86.3	.304	.610	*.016	.583	.010
Maine -----	3.5	21.0	145.1	.239	.713	.003	.725	.051
Maryland -----	8.3	26.3	132.0	.320	.486	.032	.653	.026
Massachusetts -----	5.0	23.7	123.9	.299	.462	.025	.620	.020
Michigan -----	6.8	26.3	143.0	.284	.538	.060	.697	.018
Minnesota -----	10.0	26.1	161.8	.249	.534	.106	.801	.029
Mississippi -----	5.8	13.9	95.4	.256	.633	(S)	.417	(S)
Missouri -----	6.0	27.3	146.1	.281	.524	.009	.730	.011
Montana -----	9.7	20.8	169.0	.201	.563	.006	(S)	.015
Nebraska -----	6.7	19.1	101.8	.299	.556	.010	.741	.022
Nevada -----	8.7	24.8	137.9	.267	.506	.005	.753	.024
New Hampshire -----	5.3	23.9	134.9	.279	(D)	(D)	*.414	(S)
New Jersey -----	6.8	28.6	134.5	.307	.448	.043	.723	.025
New Mexico -----	3.3	21.3	113.1	.241	.499	(D)	.707	.024
New York -----	6.5	26.2	123.2	.307	.435	.044	.654	.018
North Carolina -----	8.8	22.8	106.6	.320	.518	.056	.689	.018
North Dakota -----	8.0	(D)	103.4	(D)	.631	(D)	.705	.035
Ohio -----	5.9	26.0	135.1	.295	.481	.047	.792	.018
Oklahoma -----	6.2	19.4	85.6	.328	.593	.007	.607	.017
Oregon -----	6.1	25.6	167.7	.253	.615	(D)	.727	.034
Pennsylvania -----	8.9	26.9	144.5	.276	.477	.044	.601	.017
Rhode Island -----	5.8	42.2	314.8	.190	.385	(D)	.830	.009
South Carolina -----	8.7	20.9	96.5	.337	.629	.015	.696	.018
South Dakota -----	10.6	18.5	115.5	.269	.524	(D)	.656	(D)
Tennessee -----	7.1	21.1	96.6	.321	.612	.009	.687	.020
Texas -----	6.6	21.9	97.2	.321	.559	.016	.700	.019
Utah -----	5.5	21.8	152.4	.214	.675	(D)	.800	.009
Vermont -----	4.2	20.3	92.9	.280	.641	(D)	(D)	*.017
Virginia -----	8.0	22.0	112.2	.298	.530	.013	.625	.020
Washington -----	7.4	25.9	132.4	.282	.542	.004	.619	.026
West Virginia -----	5.9	22.3	104.7	.303	.552	.024	.689	.011
Wisconsin -----	13.3	26.7	120.7	.349	.476	.019	.745	.023
Wyoming -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Appendix A.

Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

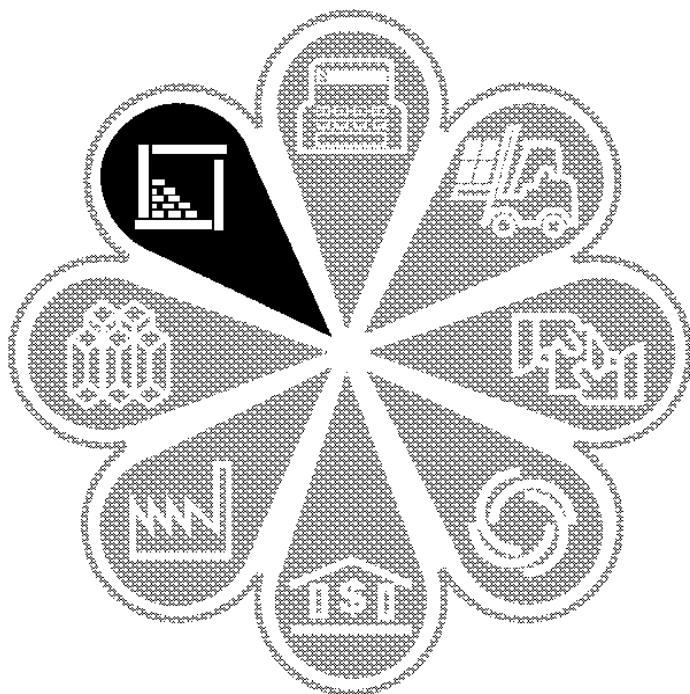
Census of Construction Industries

CC92-I-23

INDUSTRY SERIES

Excavation Work Special Trade Contractors

Industry 1794



1992 Census of Construction Industries

CC92-I-23

INDUSTRY SERIES

Excavation Work Special Trade Contractors

Industry 1794

Issued May 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Juliana Van Berkum**, **Susan L. Hostetter**, **Doris M. Kling**, **Carolyn J. Stone**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke**. Under the direction of **C. Lloyd Anderson**, the Systems Support Staff maintained the small computers and assisted in the management of computer output.

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Special Trade Contractors

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Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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Summary of Findings

Establishments classified in this industry are primarily engaged in excavation work such as foundations for buildings and subdividing and preparing land owned by others for future building construction. Contractors in this industry may also perform incidental concrete work. Contractors primarily engaged in concrete work are classified in Industry 1771, Concrete Work Special Trade Contractors. Contractors primarily engaged in trenching or in earth moving and land clearing not related to building construction are classified in Industry 1629, Heavy Construction Contractors, Not Elsewhere Classified. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$7.1 billion in total dollar value of business. Of this amount, \$6.9 billion were for the value of construction work. These establishments paid out \$1.6 billion for materials, components, and supplies and \$741 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$357 million. Value added for 1992 was \$4.3 billion.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock NO. 041-001-00314-2.

There were 13,898 establishments with total employment averaging 77,126 during the year. Total payroll for 1992 was \$1.8 billion.

Larger establishments with 20 employees or more, while representing only 5 percent of the total number of employer establishments in this industry, accounted for 44 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

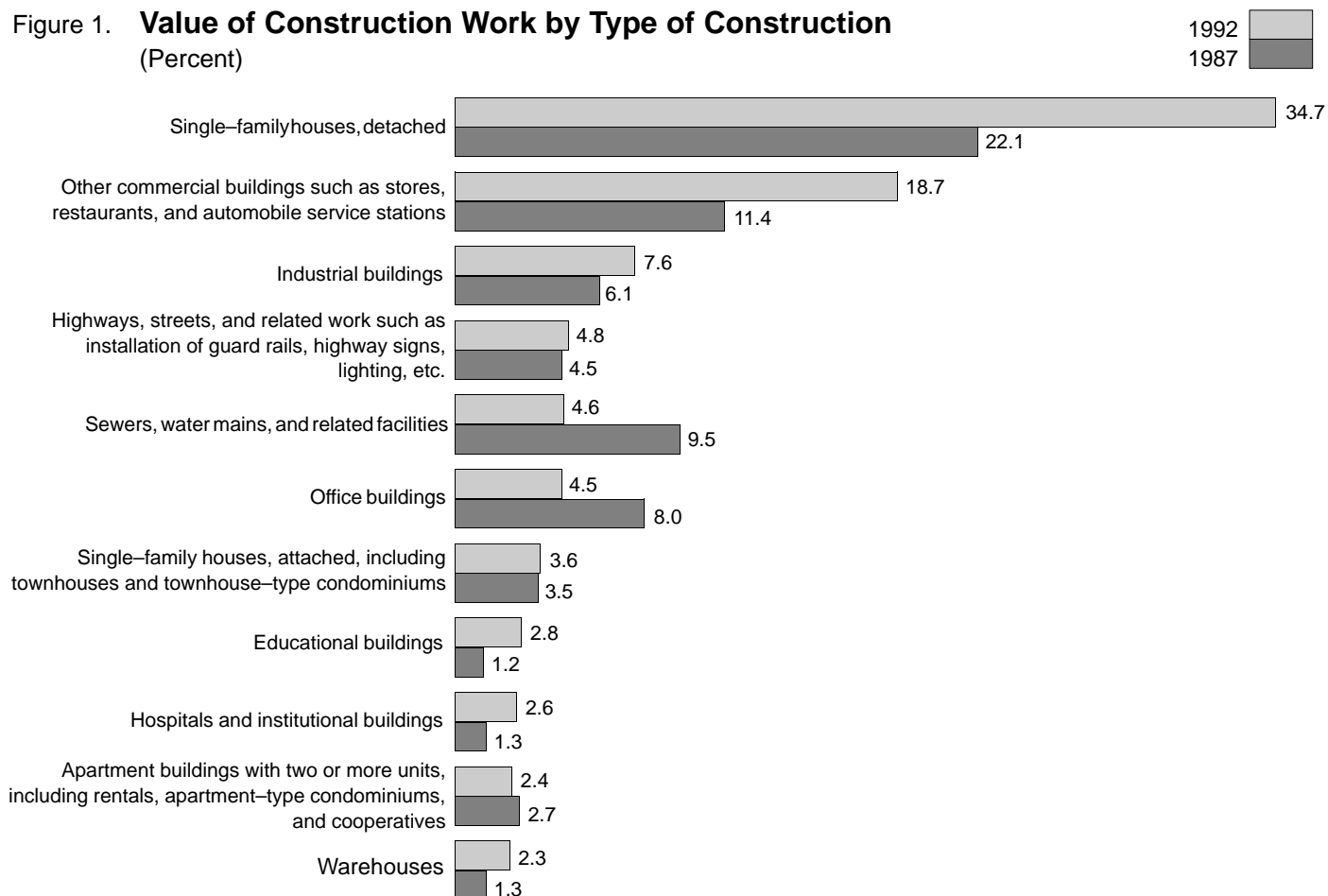


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

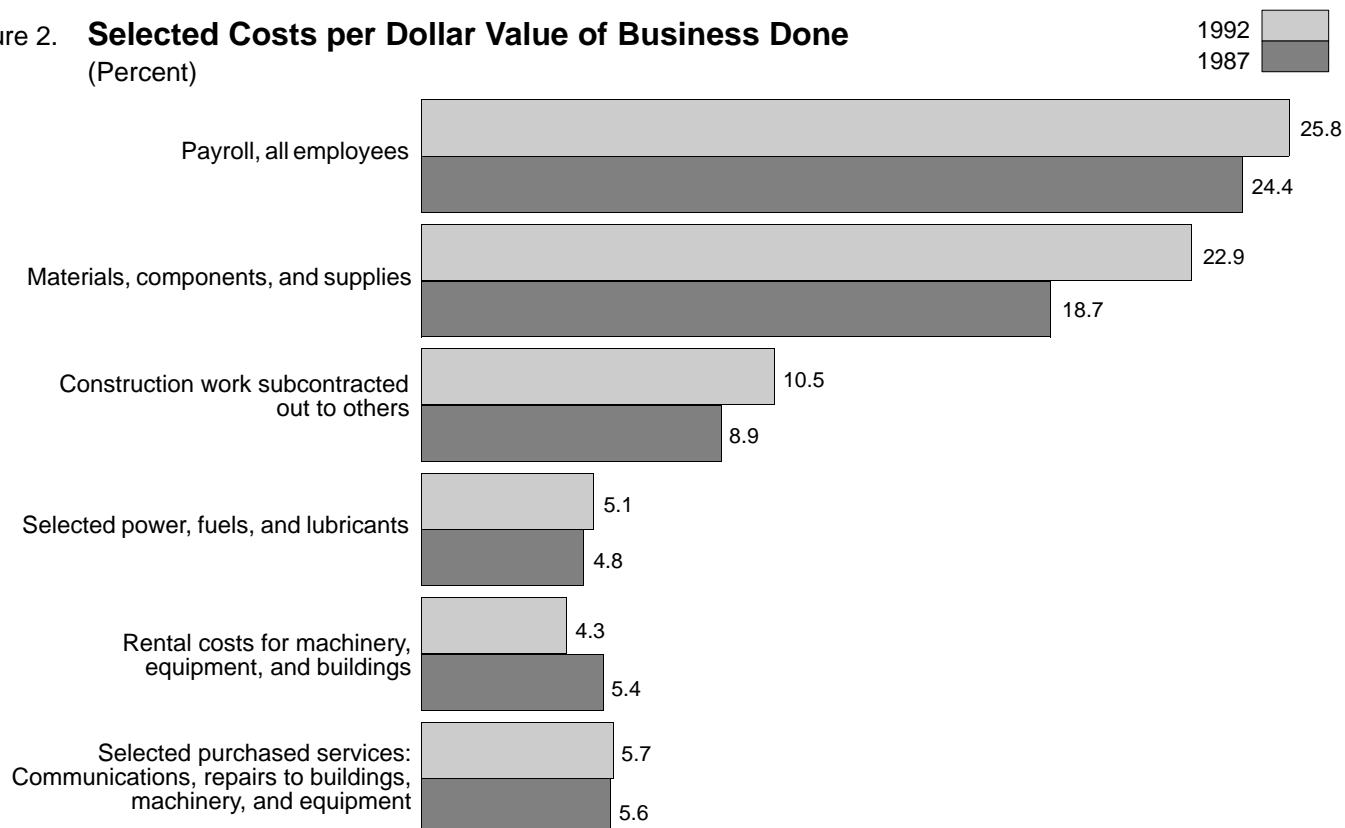


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	13 898	77 126	62 437	1 816 814	1 400 643	6 869 692	6 129 178	4 339 605	1 973 899
Alabama -----	204	1 226	988	20 728	16 257	93 005	80 872	51 679	29 912
Alaska -----	80	394	320	11 202	9 488	66 622	63 486	40 198	23 410
Arizona -----	125	666	543	14 125	10 435	46 078	42 902	34 017	9 213
Arkansas -----	105	452	368	7 284	5 587	34 535	31 971	23 892	8 112
California -----	850	6 630	5 346	193 494	141 878	765 368	664 406	455 282	218 490
Colorado -----	304	1 572	1 298	35 760	28 087	124 330	114 942	84 800	31 144
Connecticut -----	303	1 898	1 511	56 141	43 112	206 001	185 247	132 751	59 685
Delaware -----	31	237	200	6 305	4 964	26 670	22 836	13 621	9 468
District of Columbia -----	*10	60	49	2 069	1 515	10 093	8 893	6 440	2 453
Florida -----	617	3 813	3 090	79 892	58 441	306 274	269 123	177 876	100 471
Georgia -----	300	1 608	1 353	34 627	26 998	129 447	114 066	80 091	36 179
Hawaii -----	22	269	222	9 761	7 386	42 619	36 198	24 115	12 316
Idaho -----	83	272	233	4 574	3 756	21 956	19 349	17 330	3 555
Illinois -----	561	3 358	2 661	103 273	78 796	367 033	322 326	235 480	94 668
Indiana -----	433	2 378	1 858	53 123	41 554	201 687	186 112	126 205	62 096
Iowa -----	111	601	494	12 585	9 905	57 945	54 563	38 774	15 871
Kansas -----	81	433	358	10 745	7 841	36 220	32 269	23 073	9 237
Kentucky -----	248	1 082	902	20 271	16 579	90 537	81 475	58 009	25 532
Louisiana -----	81	566	464	8 870	7 182	34 811	31 978	21 621	11 156
Maine -----	227	1 185	935	23 770	18 495	87 175	82 694	56 416	32 550
Maryland -----	358	2 600	2 108	62 682	45 833	197 545	176 421	137 127	51 730
Massachusetts -----	454	2 382	1 864	63 183	47 905	229 682	202 215	150 797	61 841
Michigan -----	619	3 142	2 491	82 808	64 356	296 862	264 466	187 604	90 674
Minnesota -----	296	1 658	1 309	46 068	35 804	175 409	152 740	113 010	47 769
Mississippi -----	103	402	333	7 827	5 997	25 698	23 718	16 566	8 656
Missouri -----	307	1 622	1 310	35 072	27 474	127 515	113 480	81 980	32 355
Montana -----	69	191	142	3 321	2 572	14 218	13 339	9 159	4 751
Nebraska -----	85	539	452	13 046	9 904	42 170	39 546	30 532	10 029
Nevada -----	92	858	713	20 465	15 540	77 963	65 243	46 455	19 287
New Hampshire -----	170	604	493	12 464	10 554	50 293	45 552	33 003	17 182
New Jersey -----	463	2 215	1 773	59 766	46 050	198 211	177 315	127 812	52 410
New Mexico -----	60	495	420	7 799	6 585	29 938	28 378	19 670	*9 733
New York -----	884	4 627	3 646	121 889	95 265	451 170	400 535	287 544	126 113
North Carolina -----	379	2 225	1 839	41 098	31 868	150 750	132 608	99 472	39 265
North Dakota -----	34	118	96	1 983	1 392	8 455	8 304	6 685	1 983
Ohio -----	798	3 929	3 166	88 366	69 804	335 132	300 666	204 672	100 056
Oklahoma -----	64	369	304	7 123	5 325	40 503	32 980	25 364	(S)
Oregon -----	261	1 083	864	23 922	18 969	94 319	87 174	60 924	28 093
Pennsylvania -----	916	4 835	3 976	109 777	88 259	413 381	370 776	256 535	123 633
Rhode Island -----	99	310	236	6 285	4 728	23 662	22 079	16 201	6 642
South Carolina -----	218	1 168	938	21 397	15 181	91 521	81 290	53 581	28 585
South Dakota -----	35	188	152	4 270	2 969	14 605	12 294	8 363	3 959
Tennessee -----	247	1 195	1 006	19 608	15 757	75 936	70 636	50 155	22 009
Texas -----	464	2 787	2 294	54 516	40 824	222 444	197 970	133 574	65 456
Utah -----	86	530	447	10 716	8 743	41 409	38 950	31 446	7 574
Vermont -----	194	718	583	13 781	11 496	50 871	49 145	38 127	14 915
Virginia -----	318	2 218	1 838	45 376	34 932	178 256	148 494	97 565	56 198
Washington -----	469	2 484	2 056	60 081	47 887	221 690	208 104	152 841	71 797
West Virginia -----	153	544	457	8 873	7 086	39 587	37 397	31 013	9 436
Wisconsin -----	389	2 246	1 813	52 137	41 044	191 964	172 362	123 282	56 184
Wyoming -----	42	148	*129	*2 516	*2 283	10 127	9 293	6 878	*2 427

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
740 514	3 942 704	304 352	331 411	3 678 478	95 329	8 244 398	5 707 716	1	1	4	U.S.
12 133	(S)	(S)	*5 441	43 805	1 004	65 947	46 775	12	14	52	AL
*3 136	42 974	*2 035	4 984	34 597	(S)	(S)	(S)	17	20	36	AK
3 176	34 896	1 534	2 979	20 781	708	65 335	50 980	16	11	28	AZ
2 564	*19 090	(S)	*6 497	*19 847	592	37 923	23 579	18	18	64	AR
100 963	428 083	73 138	14 396	277 585	9 607	1 204 038	852 454	4	3	6	CA
9 387	97 868	5 361	11 923	62 385	1 580	95 200	69 386	11	9	19	CO
20 754	123 800	9 494	11 813	120 972	2 570	243 550	170 988	6	6	25	CT
3 834	15 530	3 694	*1 000	8 554	598	(D)	34 117	9	12	69	DE
1 200	10 017	359	11	254	(D)	(D)	3 443	18	12	(Z)	DC
37 150	181 899	12 484	16 468	186 540	5 316	390 622	260 320	6	6	17	FL
15 381	64 564	3 945	5 585	80 115	1 868	128 976	88 334	8	8	25	GA
6 421	15 027	1 311	2 235	11 955	158	29 426	*19 336	(Z)	(Z)	(Z)	HI
*2 607	17 822	558	1 907	10 521	(S)	(D)	(S)	26	23	38	ID
44 708	211 205	12 017	16 119	179 785	3 287	332 725	235 522	4	4	12	IL
15 574	104 565	5 529	9 860	108 496	2 110	152 092	110 810	7	7	16	IN
3 382	25 850	(S)	(S)	18 840	436	30 189	21 169	15	17	(S)	IA
3 951	20 281	693	2 276	27 088	987	76 807	53 004	15	13	34	KS
9 061	48 830	6 988	3 930	34 833	1 163	76 900	51 518	9	6	29	KY
2 833	19 302	1 921	*937	6 776	(S)	(S)	(S)	18	15	49	LA
4 481	22 100	2 728	5 279	62 690	1 273	95 173	65 318	12	11	26	ME
21 124	129 804	10 809	3 627	165 480	3 097	264 825	199 868	7	7	21	MD
27 468	100 268	6 672	6 456	128 872	4 236	423 366	295 260	8	7	17	MA
32 396	150 593	11 178	17 198	164 898	3 391	312 220	210 336	5	6	19	MI
22 668	92 209	6 128	11 592	104 660	1 692	184 266	124 822	9	6	15	MN
1 979	16 469	1 131	1 502	(S)	572	36 696	22 947	22	16	38	MS
14 035	107 773	5 429	8 628	104 488	2 186	156 413	109 122	10	8	15	MO
879	5 555	780	2 194	12 317	(S)	(S)	(S)	18	14	36	MT
2 625	26 386	1 660	3 365	19 167	329	19 309	14 629	12	13	11	NE
12 720	63 855	3 867	5 101	37 231	683	85 734	51 797	11	10	33	NV
4 741	17 035	1 610	2 074	28 668	1 565	143 366	102 587	13	12	38	NH
20 896	110 322	7 624	8 786	149 748	4 887	451 989	304 501	6	6	22	NJ
(S)	*9 266	*912	*1 172	*11 631	225	10 979	9 236	26	18	69	NM
50 635	229 704	15 289	13 945	211 217	7 028	600 041	426 135	4	4	17	NY
18 142	95 419	4 476	6 689	88 986	2 176	153 057	94 919	7	7	20	NC
(S)	*1 204	*107	*336	*1 983	306	12 492	8 591	23	29	60	ND
34 465	201 433	12 628	14 976	119 336	4 660	361 722	244 880	6	5	13	OH
7 523	22 543	2 495	2 473	12 064	585	27 394	21 975	17	14	19	OK
7 145	51 462	3 896	4 409	46 736	672	61 790	45 261	9	8	21	OR
42 605	228 550	14 017	21 553	284 422	6 168	513 173	352 227	4	3	12	PA
1 583	9 747	642	*1 096	17 976	470	40 253	31 671	8	10	45	RI
10 231	52 614	2 949	4 333	62 908	930	64 769	48 470	8	8	21	SC
*2 311	11 299	(S)	*434	(S)	164	11 676	8 611	20	16	64	SD
5 300	43 038	2 875	(S)	56 139	1 586	113 899	80 157	10	11	(S)	TN
24 474	152 668	8 688	9 252	76 744	3 978	266 629	169 881	8	7	23	TX
2 460	36 542	1 351	3 145	30 998	545	55 406	33 884	15	15	23	UT
1 727	9 399	1 226	*4 251	47 506	870	67 003	47 338	14	15	55	VT
29 762	100 768	6 451	7 246	86 676	3 545	276 291	184 398	6	6	18	VA
13 586	159 470	10 020	15 613	100 361	1 519	137 725	95 382	6	5	16	WA
2 190	(S)	563	1 826	22 936	431	32 213	21 636	17	14	22	WV
19 602	122 733	8 455	18 753	142 594	2 004	172 266	114 945	8	6	16	WI
*834	4 373	*218	*386	*3 506	(S)	(S)	(S)	38	38	51	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	13 898	13 422	19 646	16 521	1	1	1	2
Proprietors and working partners	5 414	3 329	7 412	10 009	3	4	2	3
All employees**	77 126	95 329	135 968	104 092	1	1	1	1
Construction workers:								
March	51 774	68 030	96 321	74 781	1	1	1	1
May	64 810	81 722	117 938	97 884	1	1	1	1
August	69 804	86 598	124 876	101 343	1	1	1	1
November	63 360	80 439	113 125	91 643	1	1	1	1
Average	62 437	79 198	115 059	91 522	1	1	1	1
Other employees:								
March	14 691	15 585	20 702	11 826	2	2	1	1
May	15 087	16 085	(NA)	(NA)	2	2	(NA)	(NA)
August	14 638	16 570	(NA)	(NA)	2	2	(NA)	(NA)
November	14 339	16 285	(NA)	(NA)	2	2	(NA)	(NA)
Average	14 689	16 130	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees	1 816 814	2 059 792	2 151 859	1 207 669	1	1	1	1
Payroll, construction workers	1 400 643	1 597 517	1 756 734	1 020 923	1	1	1	1
Payroll, other employees	416 170	462 274	395 124	186 746	1	1	1	1
First-quarter payroll, all employees	347 957	402 781	423 383	220 121	2	1	1	1
Fringe benefits, all employees	434 138	447 879	406 281	246 361	1	1	1	2
Legally required expenditures	284 608	310 069	305 218	144 243	2	1	1	2
Voluntary expenditures	149 530	137 810	101 063	102 118	2	2	1	3
Dollar value of business done	7 054 018	8 452 371	8 472 648	4 370 233	1	1	1	1
Value of construction work	6 869 692	8 244 398	8 181 330	4 215 722	1	1	1	1
Value of construction work subcontracted in from others	3 942 704	4 281 940	3 105 846	2 194 749	2	2	1	1
Other business receipts	184 326	207 972	291 318	154 511	4	4	2	3
Net value of construction work†	6 129 178	7 490 988	7 336 965	3 929 674	1	1	1	1
Value added††	4 339 605	5 707 716	5 507 225	2 993 648	1	1	1	1
Selected costs	2 714 413	2 744 654	2 965 423	1 376 585	1	1	1	1
Materials, components, and supplies	1 616 952	1 582 800	1 575 371	883 844	2	1	1	1
Construction work subcontracted out to others	740 514	753 409	844 364	286 048	2	3	1	1
Selected power, fuels, and lubricants	356 947	408 444	545 686	206 693	1	1	1	1
Electricity	23 051	23 079	25 546	8 028	4	2	2	2
Natural and manufactured gas	3 618	3 696	9 164	3 132	4	3	2	2
Gasoline and diesel fuel	307 368	348 871	470 497	172 041	1	1	1	1
On highway use	141 846	160 059	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use	165 522	188 812	(NA)	(NA)	1	1	(NA)	(NA)
Other, including lubricating oils and greases	22 910	32 796	40 478	23 493	2	2	2	3
Rental cost for machinery, equipment, and buildings	304 352	459 004	428 287	220 273	3	2	1	1
For machinery and equipment	259 989	419 503	394 417	208 908	3	2	1	1
For buildings	44 363	39 500	33 870	11 365	4	4	3	2
Selected purchased services	405 347	471 487	503 629	293 708	2	2	1	1
Communication services	48 233	42 182	40 539	18 789	3	2	1	2
Repairs to buildings and other structures	10 349	12 907	10 240	4 993	8	5	4	4
Repairs to machinery and equipment	346 765	416 397	452 850	269 926	2	2	1	1
Ownership of construction projects:								
Value of construction work	6 869 692	8 244 398	8 181 330	4 215 722	1	1	1	1
Government owned	1 177 713	1 178 905	2 100 654	761 080	3	3	2	1
Federal	225 396	248 603	(NA)	(NA)	6	6	(NA)	(NA)
State and local	952 317	930 302	(NA)	(NA)	3	3	(NA)	(NA)
Privately owned	5 691 979	7 065 492	6 080 675	3 454 642	2	2	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	3 527 166	2 962 122	2	2
Capital expenditures, other than land -----	331 411	465 538	4	3
New -----	222 493	352 828	4	3
Used -----	108 918	112 709	6	5
Retirements and disposition of depreciable assets -----	180 098	155 989	8	8
End-of-year gross book value of depreciable assets -----	3 678 478	3 271 670	2	2
Depreciation charges during year -----	410 033	436 178	3	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	229 305	254 391	6	6
Capital expenditures, other than land -----	18 287	30 554	12	13
New buildings and other structures -----	14 084	22 743	14	16
Used buildings and other structures -----	4 203	7 810	21	13
Retirements and disposition of depreciable assets -----	5 374	2 754	24	20
End-of-year gross book value of depreciable assets -----	242 219	282 191	6	6
Depreciation charges during year -----	21 266	25 589	7	12
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	3 297 860	2 707 730	2	2
Capital expenditures, other than land -----	313 124	434 983	4	3
New machinery and equipment, including automobiles and trucks -----	208 410	330 084	4	3
New automobiles and trucks, intended primarily for highway use -----	54 932	103 090	6	5
Used machinery and equipment, including automobiles and trucks -----	104 714	104 899	6	5
Retirements and disposition of depreciable assets -----	174 724	153 234	8	8
End-of-year gross book value of depreciable assets -----	3 436 259	2 989 479	2	2
Depreciation charges during year -----	388 767	410 589	3	3

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	13 898	1
Value of construction work	6 869 692	1
Establishments with inventories:		
Number	2 057	3
Value of construction work	1 731 593	2
Inventories ¹ :		
End of 1992, materials and supplies	28 179	6
End of 1991, materials and supplies	26 769	7
Establishments with no inventories:		
Number	5 844	2
Value of construction work	3 143 785	1
Establishments not reporting:		
Number	5 997	2
Value of construction work	1 994 314	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	13 898	9 475	2 533	1 179	553	124	31	2	—	—	
All employees** -----	77 126	16 843	16 117	15 444	15 817	8 190	4 739	(D)	—	—	
Payroll, all employees -----	1 816 814	291 122	335 343	362 684	431 804	239 690	156 702	(D)	—	—	
Dollar value of business done -----	7 054 018	1 418 894	1 260 014	1 290 577	1 559 539	937 983	588 772	(D)	—	—	
Value of construction work -----	6 869 692	1 391 029	1 230 429	1 254 591	1 516 966	905 872	572 566	(D)	—	—	
Net value of construction work† -----	6 129 178	1 307 900	1 118 004	1 141 078	1 322 236	769 199	472 492	(D)	—	—	
Value added†† -----	4 339 605	949 188	798 821	796 860	926 011	582 422	287 053	(D)	—	—	
Cost of materials, components, supplies, and fuels -----	1 973 899	386 577	348 767	380 204	438 798	218 888	201 645	(D)	—	—	
Cost of construction work subcontracted out to others -----	740 514	83 129	112 425	113 513	194 730	136 673	100 074	(D)	—	—	
Rental cost for machinery, equipment, and buildings -----	304 352	39 478	45 471	59 478	73 147	58 274	28 504	(D)	—	—	
Capital expenditures, other than land -----	331 411	74 593	63 410	75 787	58 836	39 581	19 204	(D)	—	—	
End-of-year gross book value of depreciable assets -----	3 678 478	864 920	724 018	690 464	758 296	436 523	204 257	(D)	—	—	
1987											
All employees** -----	95 329	(S)	18 208	16 703	20 626	11 822	8 548	2 756	—	—	
Value of construction work -----	8 244 398	(S)	1 316 114	1 329 732	1 853 695	1 243 071	1 199 982	(D)	—	—	
Value added†† -----	5 707 716	(S)	929 258	957 452	1 314 804	852 724	555 962	206 472	—	—	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	3	4	4	2	1	(Z)	(D)	—	—	
Net value of construction work† -----	1	3	4	4	2	(Z)	(Z)	(D)	—	—	
Capital expenditures, other than land -----	4	7	9	9	4	(Z)	(Z)	(D)	—	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	13 898	(S)	(S)	(S)	4 778	2 566	1 420	943	264	124	58
All employees** -----	77 126	(S)	(S)	(S)	11 490	12 360	12 352	15 616	8 416	6 874	5 942
Payroll, all employees -----	1 816 814	(S)	(S)	(S)	182 390	236 734	268 262	397 490	241 448	217 733	225 383
Dollar value of business done -----	7 054 018	(S)	(S)	(S)	786 207	892 281	989 227	1 449 494	911 096	820 126	1 006 229
Value of construction work -----	6 869 692	(S)	(S)	(S)	772 501	875 847	959 670	1 406 173	879 225	796 714	984 700
Net value of construction work† -----	6 129 178	(S)	(S)	(S)	733 325	829 570	876 469	1 265 604	770 408	672 874	797 117
Value added†† -----	4 339 605	(S)	(S)	(S)	528 978	600 570	623 669	889 827	550 209	483 385	530 066
Cost of materials, components, supplies, and fuels -----	1 973 899	(S)	(S)	(S)	218 054	245 434	282 357	419 098	252 070	212 901	288 580
Cost of construction work subcontracted out to others -----	740 514	(S)	(S)	(S)	39 176	46 277	83 201	140 569	108 817	123 840	187 583
Rental cost for machinery, equipment, and buildings -----	304 352	(S)	(S)	(S)	23 944	23 198	36 912	65 207	39 230	52 313	57 160
Capital expenditures, other than land -----	331 411	(S)	(S)	(S)	44 658	49 431	53 252	72 558	37 146	31 997	34 846
End-of-year gross book value of depreciable assets -----	3 678 478	(S)	(S)	(S)	514 426	552 860	568 853	784 580	422 511	367 556	347 153
1987											
All employees** -----	95 329	(S)	(S)	(S)	11 972	13 126	13 990	18 568	11 134	9 791	12 095
Value of construction work -----	8 244 398	(S)	(S)	(S)	673 802	896 554	1 034 268	1 596 316	1 147 607	1 017 889	1 694 553
Value added†† -----	5 707 716	(S)	(S)	(S)	470 552	621 144	728 562	1 158 991	792 709	691 107	1 113 466
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	(S)	4	5	5	3	1	(Z)	(Z)
Net value of construction work† -----	1	(S)	(S)	(S)	3	4	4	3	2	(Z)	(Z)
Capital expenditures, other than land -----	4	(S)	(S)	(S)	9	10	10	9	6	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

23—8 EXCAVATION WORK

CONSTRUCTION—INDUSTRY SERIES

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	6 869 692	5 373 135	792 001	414 182	1	1	3	3
Building construction	5 693 368	4 737 771	643 086	312 511	1	1	3	4
Single-family houses	2 625 097	2 287 364	190 187	147 546	2	2	5	6
Single-family houses, detached	2 380 790	2 065 311	174 596	140 883	2	2	5	6
Single-family houses, attached, including townhouses and townhouse-type condominiums	244 307	222 053	15 591	6 663	5	5	14	17
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	167 952	140 260	14 135	13 557	6	6	17	16
Office buildings	309 849	261 881	33 341	14 627	3	3	4	18
Other commercial buildings such as stores, restaurants, and automobile service stations	1 287 972	1 085 892	137 347	64 732	2	2	7	4
Industrial buildings and warehouses	680 691	519 746	122 616	38 329	3	3	7	8
Industrial buildings	524 326	399 499	92 146	32 681	3	4	5	8
Warehouses	156 365	120 247	30 471	5 647	6	5	21	14
Religious buildings	47 130	33 094	12 849	1 187	6	7	10	18
Educational buildings	192 119	126 508	52 352	13 260	5	4	11	12
Hospitals and institutional buildings	179 767	122 429	51 967	5 370	5	5	7	21
Farm buildings, nonresidential	41 758	28 222	7 115	6 421	12	14	17	22
Amusement, social, and recreational buildings, indoors	59 742	51 711	6 325	1 707	7	8	19	18
Other nonresidential buildings	101 292	80 664	14 851	5 777	9	10	13	11
Nonbuilding construction	885 950	635 364	148 915	101 671	2	2	4	4
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	332 258	208 598	76 787	46 873	2	2	3	6
Private driveways and parking areas	42 273	28 402	6 687	7 184	12	14	15	21
Recreational facilities	38 008	32 104	5 469	435	4	5	6	19
Sewers, water mains, and related facilities	313 045	249 566	32 964	30 515	3	3	6	6
Sewers, sewer lines, septic systems, and related facilities	234 347	186 593	25 089	22 664	3	3	7	7
Water mains and related facilities	78 699	62 972	7 875	7 851	4	4	10	10
Sewage treatment and water treatment plants	53 583	36 505	*13 711	3 367	11	3	40	12
Other nonbuilding construction	106 783	80 190	13 296	13 297	5	5	6	15
Construction work, n.s.k.	290 374	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
1987								
Value of construction work	8 244 398	5 759 192	650 350	375 445	1	1	2	2
Building construction	5 094 555	4 446 598	443 436	204 521	1	1	3	5
Single-family houses	2 112 521	1 895 136	132 203	85 181	2	2	6	7
Single-family houses, detached	1 820 979	1 621 328	121 202	78 447	2	2	7	8
Single-family houses, attached, including townhouses and townhouse-type condominiums	291 542	273 807	11 001	6 733	7	7	12	17
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	224 115	208 747	7 734	7 633	3	3	16	20
Office buildings	658 168	602 651	45 237	10 280	3	3	9	8
Other commercial buildings such as stores, restaurants, and automobile service stations	937 282	811 106	82 990	43 185	2	2	5	5
Industrial buildings and warehouses	611 783	518 598	66 268	26 915	2	2	4	12
Industrial buildings	504 348	423 027	56 402	24 918	3	3	4	12
Warehouses	107 434	95 571	9 866	*1 997	4	4	13	50
Religious buildings	36 140	28 445	6 901	793	5	6	7	22
Educational buildings	102 643	71 899	27 908	2 835	6	7	10	25
Hospitals and institutional buildings	105 142	67 854	34 846	2 441	5	6	9	17
Farm buildings, nonresidential	43 842	28 058	11 385	4 397	13	16	24	16
Amusement, social, and recreational buildings, indoors	13 280	10 242	1 862	1 175	19	24	25	14
Other nonresidential buildings	249 638	203 861	26 102	19 686	(NA)	(NA)	(NA)	(NA)
Nonbuilding construction	1 690 432	1 312 593	206 914	170 924	2	2	4	5
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	373 673	291 557	55 158	26 957	2	3	7	5
Private driveways and parking areas	19 428	16 480	1 462	1 485	18	21	27	24
Recreational facilities	17 419	15 126	1 843	448	14	15	11	15
Sewers, water mains, and related facilities	779 963	612 367	82 232	85 363	3	3	8	8
Sewers, sewer lines, septic systems, and related facilities	486 374	373 160	57 358	55 854	3	3	9	7
Water mains and related facilities	293 588	239 206	24 873	29 508	5	5	10	11
Sewage treatment and water treatment plants	91 322	70 666	15 688	4 966	6	6	7	21
Other nonbuilding construction	408 626	306 397	50 530	51 704	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	1 459 411	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
All establishments -----	13 898	77 126	1 816 814	6 869 692	3 759 762	6 129 178	4 339 605	740 514	1	1	2
Establishments not specializing by type -----	2 594	24 025	648 045	2 378 799	(NA)	2 087 666	1 466 959	291 133	2	2	2
Establishments specializing 51 percent or more -----	11 304	53 101	1 168 769	4 490 893	3 759 762	4 041 512	2 872 646	449 381	2	1	2
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	7 235	29 196	597 930	2 280 145	1 946 980	2 087 087	1 466 687	193 058	2	2	4
Establishments with —											
100 percent specialization -----	4 134	13 811	256 845	990 514	990 514	914 841	653 924	75 673	4	3	7
90 to 99 percent specialization -----	795	3 485	72 053	262 629	243 320	241 555	165 425	21 074	7	7	14
80 to 89 percent specialization -----	652	2 933	64 704	256 505	210 421	232 758	151 492	23 747	8	7	15
70 to 79 percent specialization -----	710	3 967	92 764	333 837	244 780	305 818	206 721	28 019	7	6	6
60 to 69 percent specialization -----	618	3 332	74 633	299 848	185 189	268 518	206 293	31 330	7	5	4
51 to 59 percent specialization -----	325	1 668	36 931	136 812	72 756	123 598	82 832	13 214	8	8	9
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	280	1 164	27 231	96 062	86 525	91 363	69 241	4 699	11	12	30
Establishments with —											
100 percent specialization -----	(S)	736	16 845	59 791	59 791	56 158	40 996	3 633	15	16	38
90 to 99 percent specialization -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
80 to 89 percent specialization -----	50	171	3 242	14 508	11 902	14 053	11 969	*454	28	29	57
70 to 79 percent specialization -----	13	159	5 160	15 575	11 010	15 216	12 152	359	23	20	9
60 to 69 percent specialization -----	*27	42	*980	2 721	1 647	*2 634	*2 295	*87	33	39	43
51 to 59 percent specialization -----	(S)	*32	*524	*2 699	*1 484	*2 590	*1 293	109	71	70	35
OFFICE BUILDINGS											
All establishments specializing in type -----	156	1 009	29 606	103 943	88 568	88 096	72 982	15 847	10	8	5
Establishments with —											
100 percent specialization -----	77	337	10 153	37 656	37 656	32 043	24 394	5 613	18	13	13
90 to 99 percent specialization -----	*5	(D)	(D)	14 591	13 512	(D)	10 979	(D)	(D)	16	(D)
80 to 89 percent specialization -----	4	98	3 840	12 086	10 395	(D)	8 584	(D)	23	14	(D)
70 to 79 percent specialization -----	37	227	6 109	24 812	18 397	23 229	19 304	1 583	29	20	5
60 to 69 percent specialization -----	31	124	2 534	9 417	5 778	8 353	6 398	1 064	32	29	11
51 to 59 percent specialization -----	3	(D)	(D)	5 381	2 829	(D)	3 322	(D)	(D)	(Z)	(D)
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	900	10 293	266 243	1 046 901	818 877	908 913	619 011	137 989	3	3	4
Establishments with —											
100 percent specialization -----	350	3 278	81 284	311 175	311 175	276 770	188 040	34 405	6	5	6
90 to 99 percent specialization -----	97	1 203	28 093	110 469	102 598	93 821	65 537	16 648	9	9	11
80 to 89 percent specialization -----	90	1 037	25 669	103 011	85 047	94 347	66 064	8 664	8	8	11
70 to 79 percent specialization -----	85	1 364	34 490	126 503	91 348	113 498	83 030	13 006	8	8	8
60 to 69 percent specialization -----	209	1 972	50 714	214 032	134 153	176 440	116 921	37 592	9	7	14
51 to 59 percent specialization -----	68	1 439	45 992	181 711	94 556	154 037	99 419	27 674	5	3	1
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	300	2 893	81 069	299 707	248 380	262 988	203 037	36 719	6	6	8
Establishments with —											
100 percent specialization -----	130	973	24 215	92 455	92 455	79 365	62 914	13 090	12	16	23
90 to 99 percent specialization -----	*18	289	7 254	26 478	24 934	(D)	18 032	(D)	14	9	(D)
80 to 89 percent specialization -----	35	626	20 066	76 185	61 861	65 548	50 499	10 638	9	7	5
70 to 79 percent specialization -----	61	498	13 112	48 524	35 296	43 438	33 044	5 086	14	11	8
60 to 69 percent specialization -----	31	457	14 431	46 211	28 451	41 424	31 852	4 787	10	9	9
51 to 59 percent specialization -----	*25	49	1 991	9 854	5 384	(D)	6 697	(D)	20	19	(D)
EDUCATIONAL BUILDINGS											
All establishments specializing in type -----	103	931	24 786	82 432	60 584	74 757	49 463	7 675	13	13	14
Establishments with —											
100 percent specialization -----	36	238	5 673	15 331	15 331	(D)	12 110	(D)	23	29	(D)
90 to 99 percent specialization -----	6	86	2 880	10 189	9 243	9 372	4 261	817	21	19	24
80 to 89 percent specialization -----	*9	129	3 266	10 510	8 457	9 202	5 569	1 309	37	25	9
70 to 79 percent specialization -----	25	111	2 303	*7 341	*5 190	(D)	*3 798	(D)	39	42	(D)
60 to 69 percent specialization -----	19	195	5 051	20 176	12 220	19 026	14 333	1 150	23	34	30
51 to 59 percent specialization -----	7	*172	5 612	18 885	10 142	16 343	9 392	2 542	40	27	(Z)
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type -----	94	693	16 842	74 161	48 320	64 400	45 209	9 760	18	17	20
Establishments with —											
100 percent specialization -----	(S)	*42	*672	*2 172	*2 172	*2 016	*1 774	(S)	71	63	(S)
90 to 99 percent specialization -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
80 to 89 percent specialization -----	—	—	—	—	—	—	—	—	—	—	—
70 to 79 percent specialization -----	*26	*202	2 897	*25 559	18 301	*22 107	(S)	3 452	40	40	23
60 to 69 percent specialization -----	*26	228	8 421	29 566	17 929	26 349	15 846	3 217	22	19	33
51 to 59 percent specialization -----	(S)	155	3 804	15 391	8 592	12 456	9 255	*2 935	37	32	47

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	13 898	62 437	51 774	64 810	69 804	63 360	1	1	1	1	1	1
Alabama	204	988	880	987	1 083	1 001	12	11	10	10	11	12
Alaska	80	320	215	369	423	274	19	18	20	17	15	22
Arizona	125	543	505	542	555	570	15	17	16	18	15	21
Arkansas	105	368	303	413	410	345	18	18	19	18	19	21
California	850	5 346	4 517	5 574	5 886	5 407	6	4	5	4	4	4
Colorado	304	1 298	1 076	1 347	1 409	1 361	10	11	11	11	11	12
Connecticut	303	1 511	1 162	1 516	1 706	1 659	7	6	7	5	5	6
Delaware	31	200	166	214	193	227	11	8	2	10	11	7
District of Columbia	*10	49	91	37	32	35	54	22	12	29	34	31
Florida	617	3 090	2 812	3 138	3 170	3 238	7	6	6	7	7	6
Georgia	300	1 353	1 277	1 388	1 391	1 356	10	8	8	8	9	8
Hawaii	22	222	235	239	204	210	4	(Z)	(Z)	(Z)	(Z)	(Z)
Idaho	83	233	195	237	272	228	19	27	28	28	26	29
Illinois	561	2 661	2 054	2 889	3 064	2 635	7	5	5	4	5	5
Indiana	433	1 858	1 534	1 887	2 080	1 929	8	7	7	7	7	8
Iowa	111	494	320	537	590	530	16	16	17	15	16	18
Kansas	81	358	310	375	366	381	15	17	16	15	14	22
Kentucky	248	902	728	999	986	895	9	9	10	9	9	9
Louisiana	81	464	440	481	478	457	22	17	16	18	17	20
Maine	227	935	540	1 037	1 224	937	12	12	15	12	12	12
Maryland	358	2 108	1 714	2 136	2 298	2 285	9	7	7	6	7	8
Massachusetts	454	1 864	1 371	1 906	2 112	2 068	8	8	9	8	8	8
Michigan	619	2 491	1 676	2 844	2 974	2 468	6	5	7	5	5	5
Minnesota	296	1 309	880	1 481	1 596	1 277	9	8	12	8	8	9
Mississippi	103	333	316	362	349	304	20	21	25	22	20	19
Missouri	307	1 310	1 143	1 329	1 479	1 287	9	9	10	9	9	9
Montana	69	142	116	133	155	162	14	18	22	18	19	18
Nebraska	85	452	382	493	483	453	18	11	15	12	10	12
Nevada	92	713	628	694	805	723	12	12	12	11	13	15
New Hampshire	170	493	399	550	572	450	13	13	16	12	13	13
New Jersey	463	1 773	1 464	1 801	1 919	1 908	7	6	7	6	6	7
New Mexico	60	420	353	456	453	420	18	27	21	28	28	27
New York	884	3 646	2 685	3 761	4 334	3 804	6	5	5	4	5	5
North Carolina	379	1 839	1 893	1 787	1 934	1 739	9	7	11	6	7	7
North Dakota	34	96	66	103	117	99	32	24	25	24	23	24
Ohio	798	3 166	2 673	3 258	3 631	3 101	6	5	6	5	5	5
Oklahoma	64	304	294	302	316	305	18	17	17	16	17	18
Oregon	261	864	772	904	955	824	10	9	9	9	9	9
Pennsylvania	916	3 976	3 441	4 139	4 420	3 904	5	4	5	4	4	4
Rhode Island	99	236	185	234	266	260	11	8	9	8	7	7
South Carolina	218	938	832	984	1 003	932	12	8	7	7	7	7
South Dakota	35	152	(S)	162	178	160	23	20	(S)	21	19	21
Tennessee	247	1 006	913	1 071	1 044	997	11	10	10	10	10	10
Texas	464	2 294	2 175	2 221	2 466	2 314	8	8	8	8	8	8
Utah	86	447	406	470	490	422	19	16	19	16	15	15
Vermont	194	583	362	581	778	612	10	14	17	16	14	16
Virginia	318	1 838	1 652	1 829	2 002	1 870	9	6	6	6	6	6
Washington	469	2 056	1 860	2 020	2 269	2 075	8	6	6	6	6	7
West Virginia	153	457	362	482	478	506	14	16	16	19	17	16
Wisconsin	389	1 813	1 217	1 968	2 257	1 808	8	8	11	9	7	8
Wyoming	42	*129	80	*142	*149	*147	27	41	37	44	43	41

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	6 869 692	13 866	6 654 894	822	214 798	8 244 398	-16.7	1	1	2
Alabama -----	91 376	(S)	(D)	(S)	(D)	80 188	14.0	14	(D)	(D)
Alaska -----	66 622	80	66 622	-	-	31 159	113.8	21	21	-
Arizona -----	47 907	125	(D)	1	(D)	68 537	-30.1	11	(D)	(D)
Arkansas -----	34 318	(S)	33 916	(S)	402	38 898	-11.8	17	18	33
California -----	766 633	850	761 750	*12	4 884	1 203 258	-36.3	3	3	(Z)
Colorado -----	120 208	304	120 138	(S)	(S)	95 066	26.4	9	9	(S)
Connecticut -----	219 487	303	202 880	19	16 607	244 545	-10.2	6	6	1
Delaware -----	29 238	(S)	25 445	*9	3 793	56 534	-48.3	10	11	21
District of Columbia -----	22 707	(S)	8 989	25	13 718	13 885	63.5	6	12	7
Florida -----	314 833	617	303 669	*22	11 163	405 148	-22.3	6	6	6
Georgia -----	132 867	300	126 074	*18	6 794	123 262	7.8	7	7	5
Hawaii -----	46 452	22	42 619	*5	3 834	*29 872	55.5	2	(Z)	20
Idaho -----	23 073	83	21 552	*15	1 521	5 311	334.4	23	24	16
Illinois -----	339 032	561	334 710	*22	4 322	355 436	-4.6	4	4	27
Indiana -----	200 407	425	195 185	32	5 222	154 456	29.8	6	6	28
Iowa -----	61 707	111	55 670	22	6 037	29 375	110.1	15	16	8
Kansas -----	38 662	81	32 997	*14	5 665	65 338	-40.8	11	13	10
Kentucky -----	93 895	248	85 850	27	8 045	81 060	15.8	6	6	15
Louisiana -----	34 766	81	34 766	-	-	35 646	-2.5	14	14	-
Maine -----	81 789	227	79 692	*14	2 097	92 167	-11.3	11	12	12
Maryland -----	188 682	358	176 689	45	11 994	250 979	-24.8	7	7	4
Massachusetts -----	218 050	453	214 304	16	3 745	416 789	-47.7	7	7	6
Michigan -----	293 515	619	290 719	*14	*2 796	301 088	-2.5	6	6	59
Minnesota -----	169 466	296	168 096	*26	1 370	167 133	1.4	6	6	36
Mississippi -----	26 586	(S)	25 588	*7	(S)	30 894	-13.9	17	17	(S)
Missouri -----	124 491	302	118 799	30	5 692	162 175	-23.2	8	9	11
Montana -----	14 341	69	14 218	(S)	(S)	16 564	-13.4	14	14	(S)
Nebraska -----	41 170	85	40 466	*7	*704	19 094	115.6	13	13	51
Nevada -----	78 743	92	(D)	3	(D)	86 898	-9.4	10	(D)	(D)
New Hampshire -----	53 752	169	49 198	29	4 554	150 087	-64.2	11	12	5
New Jersey -----	196 919	463	185 705	37	11 214	449 510	-56.2	6	6	10
New Mexico -----	31 521	(S)	29 938	(S)	*1 583	11 361	177.4	17	18	74
New York -----	453 248	884	447 761	41	5 488	608 608	-25.5	4	4	18
North Carolina -----	150 320	379	147 001	9	3 319	159 454	-5.7	6	7	17
North Dakota -----	10 118	34	8 196	*6	1 922	26 702	-62.1	25	30	35
Ohio -----	335 872	798	331 177	35	4 695	359 869	-6.7	4	4	4
Oklahoma -----	33 068	(S)	(D)	1	(D)	28 519	16.0	17	(D)	(D)
Oregon -----	93 694	261	93 193	*5	*501	57 912	61.8	8	8	55
Pennsylvania -----	408 519	916	393 403	36	15 115	490 955	-16.8	3	3	4
Rhode Island -----	23 496	99	21 114	6	2 381	41 122	-42.9	9	10	(Z)
South Carolina -----	89 098	(S)	86 301	7	2 798	61 392	45.1	8	8	7
South Dakota -----	15 305	(S)	14 395	5	911	11 912	28.5	16	17	39
Tennessee -----	79 685	247	75 048	29	4 637	118 543	-32.8	10	11	16
Texas -----	228 696	456	(D)	1	(D)	264 014	-13.4	6	(D)	(D)
Utah -----	41 409	(S)	41 409	-	-	43 976	-5.8	14	14	-
Vermont -----	52 025	194	(D)	2	(D)	63 691	-18.3	15	(D)	(D)
Virginia -----	183 397	310	174 485	43	8 912	276 642	-33.7	6	6	15
Washington -----	220 038	469	218 672	*15	1 366	154 919	42.0	5	5	13
West Virginia -----	40 865	(S)	37 831	*14	3 034	33 627	21.5	12	13	27
Wisconsin -----	197 271	389	190 201	26	7 070	145 763	35.3	6	6	15
Wyoming -----	10 353	42	10 004	*26	*349	25 041	-58.7	37	39	52

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	7 054 018	8 452 371	1	1
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS				
Excavating, earthmoving, and land clearing contractor, not connected with buildings	581 969	154 271	2	5
Heavy construction contractor	130 390	287 849	5	4
Highway and street general contractor	141 786	155 148	2	4
Paving contractor	75 341	59 508	9	7
SPECIAL TRADE CONTRACTORS				
Excavating, earth and land clearing contractor, connected with buildings	4 910 658	4 811 468	1	1
Foundation contractor, digging of	585 189	1 344 168	3	2
Subdividing and preparing land owned by others contractor	100 634	649 636	10	4
Wrecking and demolition contractor, buildings and other structures	62 256	(NA)	4	(NA)
Other construction activities	238 488	550 685	5	(NA)
OTHER BUSINESS ACTIVITIES				
Rental of construction machinery or equipment to others	42 631	70 652	8	4
Transportation of goods for others	54 978	(NA)	7	(NA)
Other business activities	83 220	67 412	6	4
Kind of business activity, n.s.k.	46 478	301 274	19	4

Table 12. **Selected Industry Ratios for Establishments With Payroll: 1992 and 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	5.5	7.1	1
Number of construction workers	4.5	5.9	1
Number of all other employees	1.1	1.2	2
Payroll, all employees \$1,000 ..	130.7	153.5	1
Payroll, construction workers do ..	100.8	119.0	1
Payroll, other employees do ..	29.9	34.4	2
Dollar value of business done do ..	507.6	629.7	1
Value of construction work do ..	494.3	614.2	1
Cost of materials, components, supplies, and fuels do ..	142.0	148.4	1
Construction work subcontracted to others do ..	53.3	56.1	2
Rental cost for machinery, equipment, and buildings do ..	21.9	34.2	3
Capital expenditures, other than land do ..	23.8	35.3	4
Gross book value of depreciable assets do ..	264.7	249.6	2
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	23.6	21.6	1
Dollar value of business done do ..	91.5	88.7	1
Value added†† do ..	56.3	59.9	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	22.4	20.2	1
Value of construction work do ..	110.0	104.1	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	28.3	28.7	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.264	.250	(Z)
Cost of materials, components, supplies, and fuels do ..	.287	.242	1
Cost of construction work subcontracted out to others do ..	.108	.091	1
Value of construction work subcontracted in from others do ..	.574	.519	2
Rental cost for machinery, equipment, and buildings do ..	.044	.056	2

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	5.5	23.6	110.0	.264	.287	.108	.574	.044
Alabama -----	6.0	16.9	94.1	.223	.322	.130	(S)	(S)
Alaska -----	4.9	28.4	208.2	.168	.351	.047	.645	*.031
Arizona -----	5.3	21.2	84.9	.307	.200	.069	.757	.033
Arkansas -----	4.3	16.1	93.8	.211	.235	.074	*.553	*.051
California -----	7.8	29.2	143.2	.253	.285	.132	.559	.096
Colorado -----	5.2	22.7	95.8	.288	.250	.076	.787	.043
Connecticut -----	6.3	29.6	136.3	.273	.290	.101	.601	.046
Delaware -----	7.6	26.6	133.4	.236	.355	.144	.582	.139
District of Columbia -----	6.0	34.5	206.0	.205	.243	.119	.992	.036
Florida -----	6.2	21.0	99.1	.261	.328	.121	.594	.041
Georgia -----	5.4	21.5	95.7	.267	.279	.119	.499	.030
Hawaii -----	12.5	36.3	192.0	.229	.289	.151	.353	.031
Idaho -----	3.3	16.8	94.2	.208	.162	*.119	.812	.025
Illinois -----	6.0	30.8	137.9	.281	.258	.122	.575	.033
Indiana -----	5.5	22.3	108.6	.263	.308	.077	.518	.027
Iowa -----	5.4	20.9	117.3	.217	.274	.058	.446	(S)
Kansas -----	5.4	24.8	101.2	.297	.255	.109	.560	.019
Kentucky -----	4.4	18.7	100.4	.224	.282	.100	.539	.077
Louisiana -----	7.0	15.7	75.0	.255	.320	.081	.554	.055
Maine -----	5.2	20.1	93.2	.273	.373	.051	.254	.031
Maryland -----	7.3	24.1	93.7	.317	.262	.107	.657	.055
Massachusetts -----	5.3	26.5	123.2	.275	.269	.120	.437	.029
Michigan -----	5.1	26.4	119.2	.279	.305	.109	.507	.038
Minnesota -----	5.6	27.8	134.0	.263	.272	.129	.526	.035
Mississippi -----	3.9	19.5	77.2	.305	.337	.077	.641	.044
Missouri -----	5.3	21.6	97.3	.275	.254	.110	.845	.043
Montana -----	2.8	17.4	100.1	.234	.334	.062	.391	.055
Nebraska -----	6.4	24.2	93.3	.309	.238	.062	.626	.039
Nevada -----	9.3	23.9	109.3	.262	.247	.163	.819	.050
New Hampshire -----	3.6	20.6	102.0	.248	.342	.094	.339	.032
New Jersey -----	4.8	27.0	111.8	.302	.264	.105	.557	.038
New Mexico -----	8.2	15.8	71.3	.260	.325	(S)	*.309	*.030
New York -----	5.2	26.3	123.7	.270	.280	.112	.509	.034
North Carolina -----	5.9	18.5	82.0	.273	.260	.120	.633	.030
North Dakota -----	3.5	16.8	88.1	.235	.235	*.018	*.142	*.013
Ohio -----	4.9	22.5	105.9	.264	.299	.103	.601	.038
Oklahoma -----	5.8	19.3	133.2	.176	(S)	.186	.557	.062
Oregon -----	4.1	22.1	109.2	.254	.298	.076	.546	.041
Pennsylvania -----	5.3	22.7	104.0	.266	.299	.103	.553	.034
Rhode Island -----	3.1	20.3	100.3	.266	.281	.067	.412	.027
South Carolina -----	5.4	18.3	97.6	.234	.312	.112	.575	.032
South Dakota -----	5.4	22.7	96.1	.292	.271	*.158	.774	(S)
Tennessee -----	4.8	16.4	75.5	.258	.290	.070	.567	.038
Texas -----	6.0	19.6	97.0	.245	.294	.110	.686	.039
Utah -----	6.2	20.2	92.6	.259	.183	.059	.882	.033
Vermont -----	3.7	19.2	87.3	.271	.293	.034	.185	.024
Virginia -----	7.0	20.5	97.0	.255	.315	.167	.565	.036
Washington -----	5.3	24.2	107.8	.271	.324	.061	.719	.045
West Virginia -----	3.5	16.3	86.6	.224	.238	.055	(S)	.014
Wisconsin -----	5.8	23.2	105.9	.272	.293	*.102	.639	.044
Wyoming -----	3.5	17.0	78.5	.248	.240	*.082	.432	.022

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

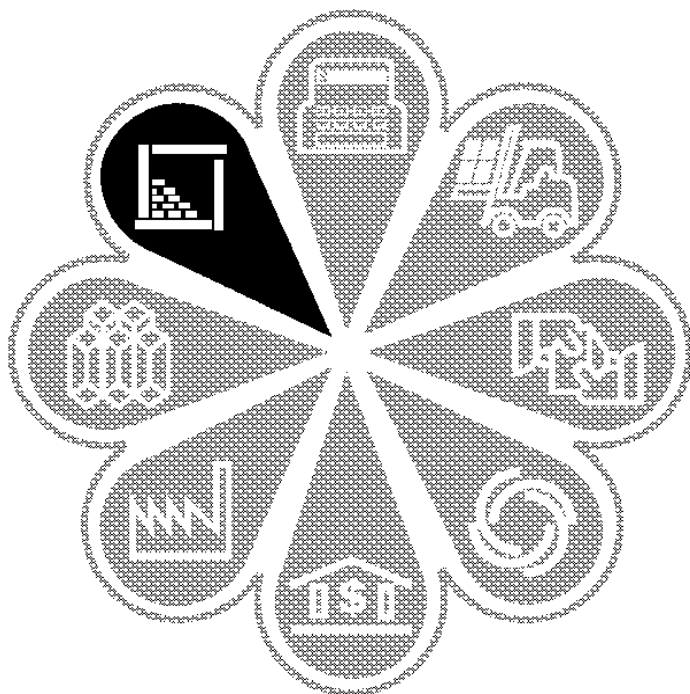
Census of Construction Industries

CC92-I-24

INDUSTRY SERIES

Wrecking and Demolition Work Special Trade Contractors

Industry 1795



1992

Census of

Construction Industries

CC92-I-24

INDUSTRY SERIES

Wrecking and

Demolition Work

Special Trade Contractors

Industry 1795

Issued October 1995



U.S. Department of Commerce

Ronald H. Brown, Secretary

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Economics and Statistics Administration

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for Economic Affairs

BUREAU OF THE CENSUS

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If you have any questions concerning the statistics in this report, call 301-457-4680.



**Economics and Statistics
Administration**

Everett M. Ehrlich, Under Secretary
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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records, however, resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year— buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Wrecking and Demolition Work Special Trade Contractors

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appears as part of the number of each page]

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Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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Summary of Findings

Establishments classified in this industry are primarily engaged in the wrecking and demolition of buildings and other structures, with or without the sale of material derived from demolishing operations. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$1.11 billion in total dollar value of business. Of this amount, \$1.06 billion were for the value of construction work. These establishments paid out \$178 million for materials, components, and supplies and \$131 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$29 million. Value added for 1992 was \$775 million.

There were 966 establishments with total employment averaging 13,112 during the year. Total payroll for 1992 was \$296 million.

Larger establishments with 20 employees or more, while representing only 16 percent of the total number of

employer establishments in this industry, accounted for 62 percent of all business done.

A “construction establishment” is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

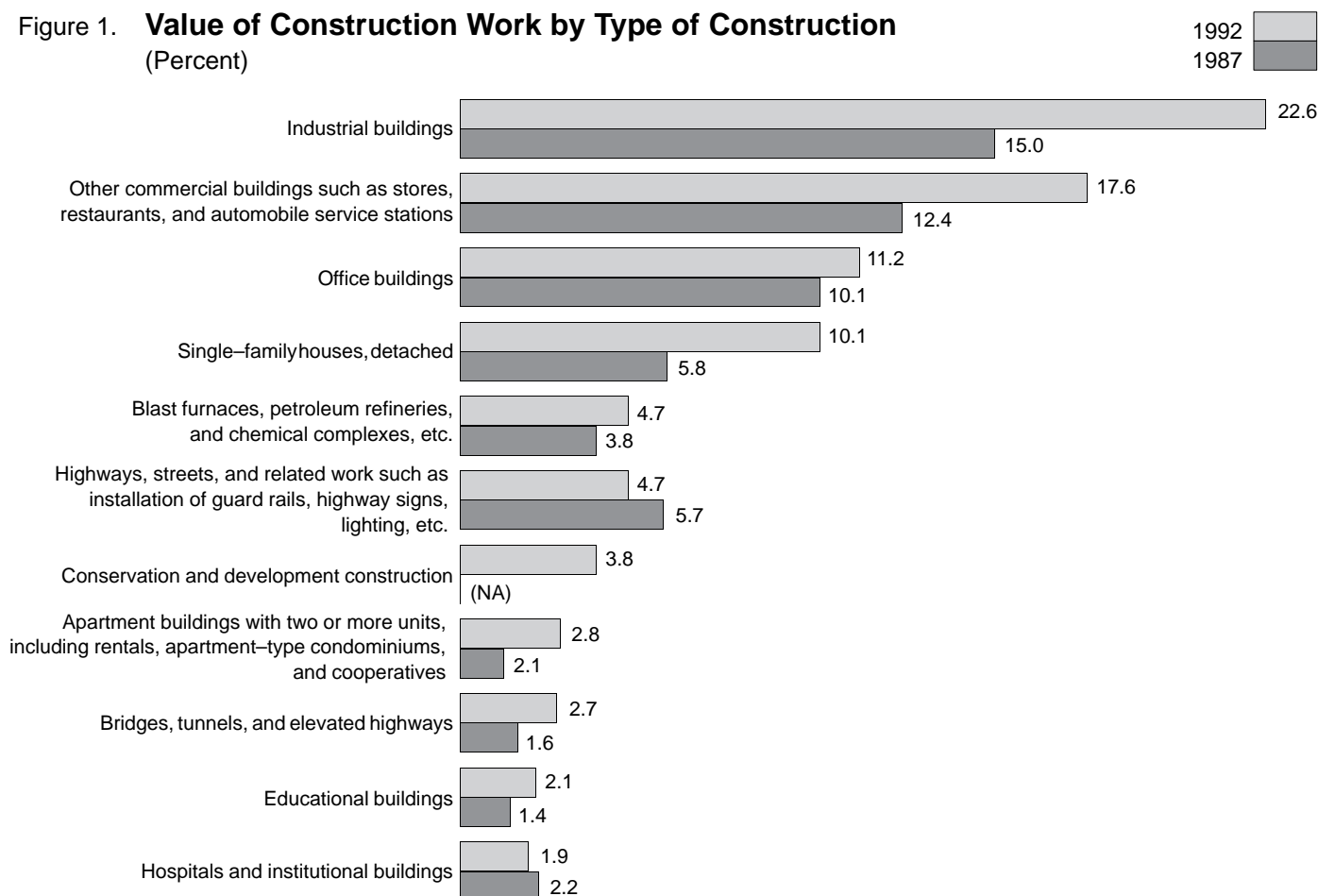


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

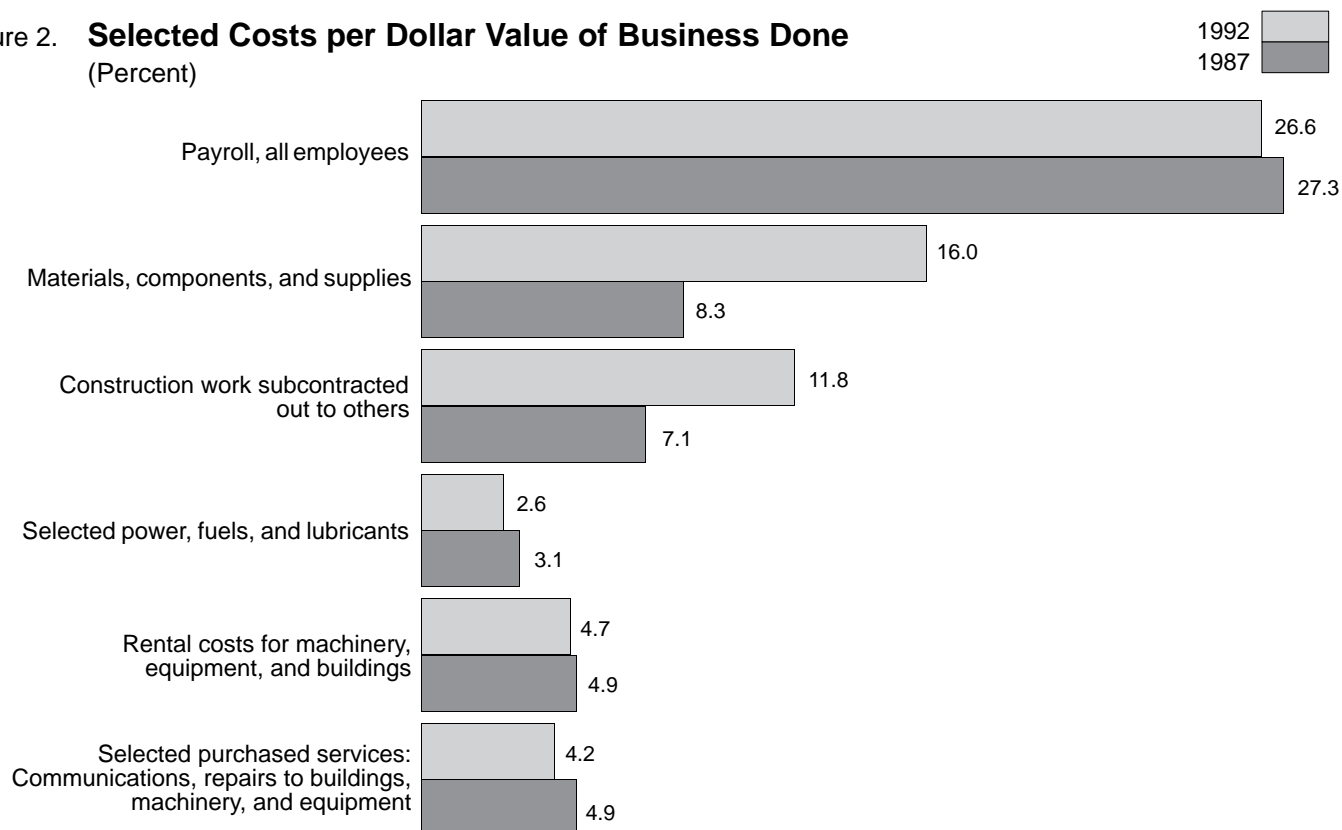


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	966	13 112	10 409	296 028	214 621	1 059 133	927 986	775 026	207 375
Alabama -----	7	186	165	2 796	2 301	5 671	5 387	6 878	(D)
Alaska -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Arizona -----	*20	(D)	(D)	(D)	(D)	(D)	10 520	(D)	(D)
Arkansas -----	*6	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
California -----	136	1 864	1 432	47 151	32 832	170 706	144 846	126 863	24 871
Colorado -----	5	63	47	1 359	1 024	6 618	6 238	4 655	(D)
Connecticut -----	14	119	89	2 688	1 741	10 321	9 977	(D)	(D)
Delaware -----	4	*79	*65	(D)	*1 206	*5 137	*4 629	*2 800	*1 829
District of Columbia -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	45	472	341	8 473	6 282	34 995	30 362	25 048	(D)
Georgia -----	*18	116	90	1 587	1 056	4 946	4 122	4 311	(D)
Hawaii -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Idaho -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois -----	62	1 602	1 312	34 519	27 266	98 876	85 152	74 209	(D)
Indiana -----	29	191	141	3 033	2 511	11 628	11 253	8 166	3 799
Iowa -----	*32	143	120	2 869	2 259	12 657	(D)	7 898	(D)
Kansas -----	13	55	48	775	599	3 546	3 325	2 717	788
Kentucky -----	9	81	65	1 601	1 297	6 017	(D)	3 720	(D)
Louisiana -----	13	(D)	(D)	(D)	2 381	13 483	13 010	(D)	(D)
Maine -----	3	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(S)
Maryland -----	31	615	493	13 231	9 770	44 273	40 139	32 615	(D)
Massachusetts -----	34	342	291	8 017	6 083	29 911	27 111	23 179	5 003
Michigan -----	55	682	530	21 935	14 518	90 706	76 410	63 137	14 590
Minnesota -----	*17	132	110	3 531	2 771	14 294	12 315	(D)	(D)
Mississippi -----	-	-	-	-	-	-	-	-	-
Missouri -----	15	152	111	3 073	2 127	17 632	10 042	8 201	2 159
Montana -----	-	-	-	-	-	-	-	-	-
Nebraska -----	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nevada -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Hampshire -----	9	73	61	(D)	1 108	6 110	(D)	(D)	(D)
New Jersey -----	37	745	601	18 811	12 493	75 765	68 369	54 741	(D)
New Mexico -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	633
New York -----	63	1 101	915	25 583	18 771	88 750	79 720	66 073	14 682
North Carolina -----	*23	321	186	5 553	4 009	16 188	10 957	16 730	(D)
North Dakota -----	-	-	-	-	-	-	-	-	-
Ohio -----	49	1 028	820	20 515	14 698	71 952	67 973	52 007	18 209
Oklahoma -----	13	100	76	2 871	1 769	10 489	10 460	7 716	3 352
Oregon -----	12	118	96	1 833	1 429	7 803	7 506	5 824	1 760
Pennsylvania -----	37	515	425	(D)	11 165	50 399	(D)	41 975	8 359
Rhode Island -----	12	(D)	98	(D)	1 769	(D)	(D)	4 329	(D)
South Carolina -----	6	41	29	645	339	2 386	(D)	(D)	571
South Dakota -----	-	-	-	-	-	-	-	-	-
Tennessee -----	12	98	80	1 436	1 147	5 371	(D)	3 331	1 072
Texas -----	47	676	569	15 388	10 363	58 732	45 887	33 409	13 165
Utah -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Vermont -----	(S)	(D)	(D)	(S)	(S)	(S)	(S)	(S)	(S)
Virginia -----	14	128	103	2 661	1 889	7 267	6 711	5 295	(D)
Washington -----	22	234	186	7 409	5 291	22 909	21 153	20 165	(D)
West Virginia -----	3	(D)	(D)	50	50	(D)	(D)	105	75
Wisconsin -----	18	114	88	2 819	1 932	11 217	10 024	8 244	1 895
Wyoming -----	-	-	-	-	-	-	-	-	-

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
131 147	433 308	52 055	23 130	302 912	14 109	912 484	781 854	2	2	6	U.S.
284	557	(D)	(D)	4 952	95	4 437	4 636	(Z)	(Z)	(D)	AL
(D)	—	(D)	*30	*2 092	(D)	(D)	(D)	(D)	(D)	65	AK
(D)	(D)	(D)	(D)	(D)	(S)	(S)	(S)	(D)	(D)	36	AZ
(S)	(D)	(D)	—	—	(D)	468	287	(S)	(S)	—	AR
25 860	75 612	*13 227	2 681	46 792	2 572	132 149	113 285	5	7	32	CA
380	(D)	*790	*213	*4 910	177	6 222	5 295	(Z)	(Z)	65	CO
344	4 772	101	(D)	1 223	270	22 012	18 443	(Z)	(Z)	(D)	CT
*508	(D)	*557	(D)	3 004	(D)	(D)	(D)	57	53	(D)	DE
—	(D)	(D)	(D)	(D)	—	—	—	(D)	(D)	(D)	DC
4 633	5 745	1 622	630	14 022	297	17 859	15 226	7	11	7	FL
824	1 527	245	99	2 854	198	13 068	11 652	19	19	(Z)	GA
(D)	(D)	(D)	(D)	(D)	26	2 636	2 413	(D)	(D)	(D)	HI
(D)	(D)	(D)	(D)	(D)	895	(D)	(D)	(D)	(D)	(D)	ID
13 724	43 060	3 441	3 432	26 701	895	81 489	74 728	3	4	(Z)	IL
*375	*2 088	*136	111	1 222	45	1 679	1 409	39	32	8	IN
(D)	1 502	107	79	1 733	*122	5 039	3 906	25	(Z)	(Z)	IA
221	836	54	(D)	2 024	(D)	(D)	(D)	8	5	(D)	KS
(D)	(D)	(D)	(S)	2 836	52	2 912	2 508	(Z)	(D)	(S)	KY
*473	(D)	313	*297	4 016	134	8 205	6 959	(D)	16	42	LA
(D)	(D)	(D)	(D)	(D)	(S)	(D)	*1 096	(S)	(D)	(D)	ME
4 135	21 425	2 360	802	12 031	766	37 403	33 514	4	4	(Z)	MD
2 799	16 282	(S)	(D)	6 516	327	32 808	27 366	13	4	(D)	MA
14 296	40 987	5 077	1 714	21 337	654	81 751	67 723	4	5	12	MI
1 979	8 121	*1 339	962	8 106	*117	*6 195	*4 269	11	6	34	MN
—	—	—	—	—	*81	2 861	2 675	—	—	—	MS
7 590	6 264	918	404	3 533	107	12 822	8 646	14	13	(Z)	MO
(D)	(D)	(D)	—	(D)	(S)	(S)	(S)	—	—	—	MT
(D)	(D)	(D)	—	(D)	(D)	(D)	(D)	(D)	(D)	—	NE
(D)	(D)	231	(D)	2 559	*97	5 780	5 691	(D)	(D)	—	NV
(S)	35 964	2 119	*1 240	8 659	683	47 875	39 988	4	6	65	NJ
(D)	1 435	(D)	(D)	(D)	93	4 542	3 480	(D)	(D)	(D)	NM
9 030	31 087	3 962	1 190	22 528	1 533	110 716	89 154	(Z)	(Z)	(Z)	NY
5 231	2 448	(D)	(D)	(D)	357	17 729	(D)	24	25	(D)	NC
—	—	—	—	—	(D)	798	550	—	—	—	ND
3 979	21 466	1 162	401	20 718	628	36 809	32 049	4	4	(Z)	OH
*28	6 865	716	948	7 515	131	8 336	7 713	35	26	20	OK
297	1 831	(S)	173	1 176	89	7 116	5 301	19	16	(Z)	OR
(D)	19 059	1 979	401	10 849	887	41 061	40 535	5	(D)	(Z)	PA
309	(D)	(D)	133	2 007	87	8 546	7 560	(D)	(D)	9	RI
(D)	809	78	(D)	(D)	*55	1 757	1 545	(Z)	(D)	(D)	SC
(D)	—	—	—	—	—	—	—	—	—	—	SD
(D)	953	242	110	1 577	165	*10 159	*8 632	(Z)	(D)	(Z)	TN
12 845	25 230	3 779	1 512	12 520	687	46 756	38 992	14	5	(Z)	TX
(D)	(D)	(D)	(D)	(D)	162	5 491	3 611	(D)	(D)	(D)	UT
—	—	—	—	(D)	—	—	—	(D)	(S)	—	VT
*556	4 545	234	165	*7 424	425	25 551	24 155	26	27	21	VA
1 756	14 399	1 204	902	11 300	262	19 033	16 030	6	10	(Z)	WA
(D)	(D)	(D)	(D)	(D)	42	(D)	1 882	(D)	(D)	(D)	WV
1 193	555	434	1 021	5 990	136	5 479	4 927	3	4	(Z)	WI
—	—	—	—	—	—	—	—	—	—	—	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	966	1 240	890	978	4	5	3	3
Proprietors and working partners	197	241	223	359	10	16	11	6
All employees**	13 112	14 109	8 402	8 295	2	2	2	1
Construction workers:								
March	9 430	11 005	6 967	6 160	2	2	1	1
May	10 611	11 427	6 932	7 418	2	2	1	1
August	11 375	12 420	7 572	7 553	2	2	2	2
November	10 220	11 910	7 009	6 803	2	3	2	2
Average	10 409	11 686	7 201	6 998	2	2	1	2
Other employees:								
March	2 626	2 288	1 201	1 235	3	3	2	2
May	2 725	2 459	(NA)	(NA)	3	3	(NA)	(NA)
August	2 668	2 423	(NA)	(NA)	3	3	(NA)	(NA)
November	2 791	2 503	(NA)	(NA)	3	3	(NA)	(NA)
Average	2 702	2 422	(NA)	(NA)	3	2	(NA)	(NA)
Payroll, all employees	296 028	261 459	130 077	89 020	1	2	1	1
Payroll, construction workers	214 621	195 435	107 158	70 233	1	2	1	1
Payroll, other employees	81 406	66 024	22 919	18 787	2	2	1	1
First-quarter payroll, all employees	67 924	56 428	29 731	18 809	3	2	1	1
Fringe benefits, all employees	67 843	57 615	24 866	17 780	2	2	1	1
Legally required expenditures	47 357	42 391	17 693	11 186	2	3	2	1
Voluntary expenditures	20 485	15 224	7 173	6 594	2	3	1	1
Dollar value of business done	1 113 549	958 834	402 993	258 204	2	2	1	1
Value of construction work	1 059 133	912 484	376 895	240 630	2	2	1	1
Value of construction work subcontracted in from others	433 308	364 834	110 771	63 673	4	4	3	4
Other business receipts	54 416	46 350	26 098	17 574	1	3	1	1
Net value of construction work†	927 986	844 714	340 696	229 161	2	2	1	1
Value added††	775 026	781 854	313 761	210 606	2	2	1	1
Selected costs	338 522	176 979	89 232	47 598	3	4	1	1
Materials, components, and supplies	178 163	79 210	32 903	25 857	3	5	2	1
Construction work subcontracted out to others	131 147	67 769	36 198	11 470	5	6	1	1
Selected power, fuels, and lubricants	29 212	30 000	20 130	10 271	3	3	2	2
Electricity	2 668	2 285	1 346	801	3	6	2	2
Natural and manufactured gas	1 665	501	453	353	1	3	4	29
Gasoline and diesel fuel	22 688	24 766	16 899	8 072	3	3	2	1
On highway use	14 565	15 431	(NA)	(NA)	3	3	(NA)	(NA)
Off highway use	8 123	9 334	(NA)	(NA)	4	4	(NA)	(NA)
Other, including lubricating oils and greases	2 192	2 446	1 431	1 046	3	4	2	2
Rental cost for machinery, equipment, and buildings	52 055	47 066	24 496	13 912	11	4	1	2
For machinery and equipment	42 339	40 079	21 437	13 003	13	4	1	2
For buildings	9 716	6 986	3 059	909	6	10	5	4
Selected purchased services	46 435	46 977	23 209	16 881	3	4	1	1
Communication services	8 980	7 002	3 490	2 031	3	4	3	2
Repairs to buildings and other structures	2 633	1 470	603	391	3	6	10	1
Repairs to machinery and equipment	34 822	38 505	19 116	14 460	3	5	1	1
Ownership of construction projects:								
Value of construction work	1 059 133	912 484	376 895	240 630	2	2	1	1
Government owned	315 706	213 575	85 470	50 156	5	6	4	2
Federal	55 442	42 239	(NA)	(NA)	10	9	(NA)	(NA)
State and local	260 264	171 336	(NA)	(NA)	5	6	(NA)	(NA)
Privately owned	743 427	698 908	291 424	190 475	3	2	2	2

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	293 948	244 635	5	4
Capital expenditures, other than land -----	23 130	40 895	6	8
New -----	18 911	26 763	7	8
Used -----	4 219	14 132	9	13
Retirements and disposition of depreciable assets -----	14 166	11 624	12	7
End-of-year gross book value of depreciable assets -----	302 912	273 906	5	4
Depreciation charges during year -----	36 650	30 806	6	4
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	32 802	21 683	2	7
Capital expenditures, other than land -----	819	2 770	14	24
New buildings and other structures -----	613	1 710	17	32
Used buildings and other structures -----	206	1 060	20	37
Retirements and disposition of depreciable assets -----	25	*975	27	57
End-of-year gross book value of depreciable assets -----	33 596	23 478	2	7
Depreciation charges during year -----	2 748	2 057	4	9
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	261 146	222 952	6	4
Capital expenditures, other than land -----	22 311	38 125	6	8
New machinery and equipment, including automobiles and trucks -----	18 297	25 053	7	8
New automobiles and trucks, intended primarily for highway use -----	6 383	13 180	12	5
Used machinery and equipment, including automobiles and trucks -----	4 013	13 072	9	14
Retirements and disposition of depreciable assets -----	14 141	10 649	12	5
End-of-year gross book value of depreciable assets -----	269 316	250 428	5	4
Depreciation charges during year -----	33 902	28 748	6	4

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	966	4
Value of construction work	1 059 133	2
Establishments with inventories:		
Number	177	5
Value of construction work	281 195	3
Inventories¹:		
End of 1992, materials and supplies	6 464	2
End of 1991, materials and supplies	5 916	3
Establishments with no inventories:		
Number	300	5
Value of construction work	361 337	3
Establishments not reporting:		
Number	490	5
Value of construction work	416 601	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments	966	440	214	160	108	29	13	1	1	—
All employees**	13 112	970	1 407	2 147	3 278	2 077	3 233	(D)	(D)	—
Payroll, all employees	296 028	16 692	27 533	50 007	83 251	53 022	65 522	(D)	(D)	—
Dollar value of business done	1 113 549	95 309	126 028	206 234	287 270	199 282	199 426	(D)	(D)	—
Value of construction work	1 059 133	93 450	121 763	201 712	278 593	188 287	175 327	(D)	(D)	—
Net value of construction work†	927 986	76 946	105 240	176 310	240 539	179 912	149 039	(D)	(D)	—
Value added††	775 026	56 445	83 365	143 240	202 059	153 482	136 435	(D)	(D)	—
Cost of materials, components, supplies, and fuels	207 375	22 360	26 139	37 591	47 157	37 425	36 703	(D)	(D)	—
Cost of construction work subcontracted out to others	131 147	16 504	16 523	25 403	38 054	8 375	26 288	(D)	(D)	—
Rental cost for machinery, equipment, and buildings	52 055	2 480	6 556	*12 792	16 229	13 998	(D)	(D)	(D)	—
Capital expenditures, other than land	23 130	1 697	3 452	4 759	7 258	5 964	(D)	(D)	(D)	—
End-of-year gross book value of depreciable assets	302 912	23 497	39 636	65 612	97 780	24 532	51 855	(D)	(D)	—
1987										
All employees**	14 109	1 575	1 890	2 267	3 317	1 999	3 059	(D)	(D)	—
Value of construction work	912 484	89 489	133 446	157 078	249 187	283 281	(D)	(D)	(D)	—
Value added††	781 854	73 148	103 927	130 246	220 526	157 804	96 203	(D)	(D)	—
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees**	2	9	8	7	4	(Z)	(Z)	(D)	(D)	—
Net value of construction work†	2	10	7	7	2	(Z)	(Z)	(D)	(D)	—
Capital expenditures, other than land	6	7	8	22	7	(Z)	(D)	(D)	(D)	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments	966	(S)	(S)	80	216	185	184	129	57	33	14
All employees**	13 112	(S)	(S)	128	675	1 172	1 846	2 371	1 999	2 512	2 346
Payroll, all employees	296 028	(S)	(S)	1 531	8 811	18 129	35 828	55 041	53 271	63 029	59 978
Dollar value of business done	1 113 549	(S)	(S)	5 601	35 224	64 178	128 895	198 146	207 709	236 751	235 691
Value of construction work	1 059 133	(S)	(S)	5 594	34 389	61 984	125 181	191 114	199 912	229 370	210 238
Net value of construction work†	927 986	(S)	(S)	5 492	31 054	57 863	113 171	168 755	173 319	377 002	(D)
Value added††	775 026	(S)	(S)	4 760	25 375	41 497	85 955	141 526	144 788	167 940	162 121
Cost of materials, components, supplies, and fuels	207 375	(S)	(S)	739	6 514	18 561	30 930	34 262	36 327	79 775	(D)
Cost of construction work subcontracted out to others	131 147	(S)	(S)	102	(S)	4 120	12 010	22 358	26 593	62 606	(D)
Rental cost for machinery, equipment, and buildings	52 055	(S)	(S)	193	(S)	3 176	4 855	8 444	15 430	9 709	8 911
Capital expenditures, other than land	23 130	(S)	(S)	17	(S)	1 304	3 191	6 866	4 577	1 961	4 589
End-of-year gross book value of depreciable assets	302 912	(S)	(S)	*2 666	12 313	19 701	40 060	75 463	62 137	31 364	58 980
1987											
All employees**	14 109	(S)	(S)	(S)	1 302	(S)	1 794	2 972	1 851	4 265	(D)
Value of construction work	912 484	(S)	(S)	(S)	53 642	(S)	106 743	206 384	469 052	(D)	(D)
Value added††	781 854	(S)	(S)	(S)	42 599	(S)	93 111	169 400	134 017	280 497	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	2	(S)	(S)	15	7	15	7	4	3	(Z)	(Z)
Net value of construction work†	2	(S)	(S)	16	8	13	8	5	5	(Z)	(D)
Capital expenditures, other than land	6	(S)	(S)	21	(S)	13	4	17	7	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	1 059 133	(S)	(S)	(S)	2	(S)	(S)	(S)
Building construction	782 322	(S)	(S)	(S)	2	(S)	(S)	(S)
Single-family houses	117 358	(S)	(S)	(S)	6	(S)	(S)	(S)
Single-family houses, detached	107 178	(S)	(S)	(S)	6	(S)	(S)	(S)
Single-family houses, attached, including townhouses and townhouse-type condominiums	10 180	(S)	(S)	(S)	9	(S)	(S)	(S)
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	30 042	(S)	(S)	(S)	10	(S)	(S)	(S)
Other residential buildings, including hotels, motels, and tourist cabins	10 882	(S)	(S)	(S)	8	(S)	(S)	(S)
Office buildings	118 917	(S)	(S)	(S)	3	(S)	(S)	(S)
Other commercial buildings such as stores, restaurants, and automobile service stations	186 773	(S)	(S)	(S)	6	(S)	(S)	(S)
Industrial buildings and warehouses	258 068	(S)	(S)	(S)	1	(S)	(S)	(S)
Industrial buildings	239 228	(S)	(S)	(S)	1	(S)	(S)	(S)
Warehouses	18 840	(S)	(S)	(S)	5	(S)	(S)	(S)
Educational buildings	22 466	(S)	(S)	(S)	3	(S)	(S)	(S)
Hospitals and institutional buildings	20 025	(S)	(S)	(S)	2	(S)	(S)	(S)
Other nonresidential buildings	17 790	(S)	(S)	(S)	13	(S)	(S)	(S)
Nonbuilding construction	251 837	(S)	(S)	(S)	3	(S)	(S)	(S)
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	49 957	(S)	(S)	(S)	6	(S)	(S)	(S)
Bridges, tunnels, and elevated highways	28 486	(S)	(S)	(S)	9	(S)	(S)	(S)
Conservation and development construction	39 833	(S)	(S)	(S)	13	(S)	(S)	(S)
Sewers, water mains, and related facilities	17 925	(S)	(S)	(S)	2	(S)	(S)	(S)
Mass transit construction	* 6 426	(S)	(S)	(S)	46	(S)	(S)	(S)
Blast furnaces, petroleum refineries, chemical complexes, etc.	50 169	(S)	(S)	(S)	1	(S)	(S)	(S)
Other nonbuilding construction	59 043	(S)	(S)	(S)	6	(S)	(S)	(S)
Construction work, n.s.k.	24 974	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1987								
Value of construction work	912 484	(S)	(S)	(S)	2	(S)	(S)	(S)
Building construction	518 990	(S)	(S)	(S)	2	(S)	(S)	(S)
Single-family houses	60 203	(S)	(S)	(S)	8	(S)	(S)	(S)
Single-family houses, detached	52 773	(S)	(S)	(S)	7	(S)	(S)	(S)
Single-family houses, attached, including townhouses and townhouse-type condominiums	7 429	(S)	(S)	(S)	22	(S)	(S)	(S)
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	18 865	(S)	(S)	(S)	4	(S)	(S)	(S)
Other residential buildings, including hotels, motels, and tourist cabins	14 373	(S)	(S)	(S)	8	(S)	(S)	(S)
Office buildings	92 140	(S)	(S)	(S)	1	(S)	(S)	(S)
Other commercial buildings such as stores, restaurants, and automobile service stations	113 540	(S)	(S)	(S)	3	(S)	(S)	(S)
Industrial buildings and warehouses	155 531	(S)	(S)	(S)	1	(S)	(S)	(S)
Industrial buildings	136 744	(S)	(S)	(S)	1	(S)	(S)	(S)
Warehouses	18 787	(S)	(S)	(S)	3	(S)	(S)	(S)
Educational buildings	12 769	(S)	(S)	(S)	6	(S)	(S)	(S)
Hospitals and institutional buildings	20 045	(S)	(S)	(S)	3	(S)	(S)	(S)
Other nonresidential buildings	31 524	(S)	(S)	(S)	7	(S)	(S)	(S)
Nonbuilding construction	203 432	(S)	(S)	(S)	6	(S)	(S)	(S)
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	51 949	(S)	(S)	(S)	11	(S)	(S)	(S)
Bridges, tunnels, and elevated highways	14 832	(S)	(S)	(S)	36	(S)	(S)	(S)
Sewers, water mains, and related facilities	16 064	(S)	(S)	(S)	7	(S)	(S)	(S)
Blast furnaces, petroleum refineries, chemical complexes, etc.	35 028	(S)	(S)	(S)	2	(S)	(S)	(S)
Other nonbuilding construction	85 559	(S)	(S)	(S)	8	(S)	(S)	(S)
Construction work, n.s.k.	190 062	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
All establishments -----	966	13 112	296 028	1 059 133	636 486	927 986	775 026	131 147	2	2	5
Establishments not specializing by type -----	214	3 678	99 502	333 110	(NA)	294 255	262 149	38 855	3	4	6
Establishments specializing 51 percent or more -----	752	9 433	196 526	726 023	636 486	633 731	512 877	92 292	2	2	7
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	155	880	13 644	60 670	48 637	55 893	42 953	4 777	15	12	13
Establishments with —											
100 percent specialization -----	60	313	4 315	17 859	17 859	16 374	12 019	1 485	28	25	5
90 to 99 percent specialization -----	35	162	2 693	11 723	10 772	11 012	7 643	711	23	17	15
80 to 89 percent specialization -----	7	49	1 152	3 730	3 057	2 624	3 071	1 106	3	14	18
70 to 79 percent specialization -----	25	107	2 035	7 940	5 825	7 426	6 734	514	23	28	33
60 to 69 percent specialization -----	16	*201	2 467	11 140	6 692	10 968	7 860	172	41	28	6
51 to 59 percent specialization -----	*12	*47	981	*8 278	*4 432	*7 488	5 627	*790	47	49	66
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	105	1 481	31 906	134 967	114 215	106 054	88 630	28 912	6	9	22
Establishments with —											
100 percent specialization -----	43	556	9 929	41 678	41 678	35 131	28 191	6 546	14	19	35
90 to 99 percent specialization -----	20	307	6 238	33 772	30 649	23 352	19 528	*10 420	11	25	57
80 to 89 percent specialization -----	10	125	3 078	16 974	14 104	(D)	7 953	(D)	(Z)	(Z)	(D)
70 to 79 percent specialization -----	13	237	5 438	15 593	11 531	14 381	14 463	1 212	(Z)	(Z)	(Z)
60 to 69 percent specialization -----	10	157	4 727	16 922	10 614	14 305	12 234	2 617	14	7	(Z)
51 to 59 percent specialization -----	10	98	2 496	10 029	5 639	(D)	6 261	(D)	31	35	(D)
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	65	2 638	53 980	190 504	164 938	172 767	144 648	17 737	3	2	1
Establishments with —											
100 percent specialization -----	24	1 016	18 905	79 393	79 393	75 821	56 030	3 572	(Z)	(Z)	(Z)
90 to 99 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
80 to 89 percent specialization -----	(S)	(D)	(D)	(D)	(D)	30 113	(D)	(D)	(D)	(D)	(D)
70 to 79 percent specialization -----	*17	341	9 555	39 160	27 726	31 508	28 374	7 652	20	8	3
60 to 69 percent specialization -----	8	199	4 191	10 657	6 536	9 309	9 127	1 348	(Z)	(Z)	(Z)
51 to 59 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	966	10 409	9 430	10 611	11 375	10 220	4	2	2	2	2	2
Alabama	7	165	171	180	167	142	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Alaska	1	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
Arizona	*20	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Arkansas	*6	(S)	(S)	(S)	*20	*11	67	(S)	(S)	(S)	74	67
California	136	1 432	932	1 588	1 672	1 533	13	5	5	4	5	7
Colorado	5	47	44	38	53	52	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Connecticut	14	89	89	80	92	96	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Delaware	4	*65	*60	*62	*69	*68	35	55	56	56	59	53
District of Columbia	1	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
Florida	45	341	323	337	378	328	20	10	10	9	10	10
Georgia	*18	90	*134	89	67	71	42	25	45	17	(Z)	(Z)
Hawaii	3	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
Idaho	1	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
Illinois	62	1 312	1 220	1 266	1 505	1 257	20	2	2	2	2	2
Indiana	29	141	140	160	134	129	29	32	35	25	31	38
Iowa	*32	120	91	152	138	97	40	25	29	26	25	31
Kansas	13	48	46	47	54	44	34	9	10	10	8	10
Kentucky	9	65	74	68	60	59	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Louisiana	13	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Maine	3	(S)	(S)	(S)	(S)	(S)	(Z)	(S)	(S)	(S)	(S)	(S)
Maryland	31	493	456	502	512	503	25	4	4	4	5	4
Massachusetts	34	291	269	339	287	271	12	14	15	19	11	8
Michigan	55	530	499	566	564	491	14	3	4	3	4	4
Minnesota	*17	110	(D)	(D)	156	118	44	14	(D)	(D)	24	19
Mississippi	—	—	—	—	—	—	—	—	—	—	—	—
Missouri	15	111	110	118	121	96	21	11	8	13	13	7
Montana	—	—	—	—	—	—	—	—	—	—	—	—
Nebraska	4	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
Nevada	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Hampshire	9	61	56	70	66	50	27	8	4	10	11	5
New Jersey	37	601	545	606	658	594	5	5	3	3	5	7
New Mexico	3	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
New York	63	915	857	936	987	881	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
North Carolina	*23	186	178	187	199	181	41	24	25	24	23	25
North Dakota	—	—	—	—	—	—	—	—	—	—	—	—
Ohio	49	820	727	811	896	847	22	4	3	4	4	4
Oklahoma	13	76	69	76	84	76	38	39	29	39	35	33
Oregon	12	96	110	(S)	95	11	19	21	(S)	(S)	21	21
Pennsylvania	37	425	386	437	465	413	8	4	4	4	5	5
Rhode Island	12	98	82	94	(D)	(D)	12	6	7	6	(D)	(D)
South Carolina	6	29	24	33	30	28	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
South Dakota	—	—	—	—	—	—	—	—	—	—	—	—
Tennessee	12	80	74	73	85	88	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Texas	47	569	636	547	584	508	18	15	21	13	11	12
Utah	2	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
Vermont	(S)	(D)	(S)	(D)	(S)	(D)	(S)	(D)	(S)	(D)	(S)	(D)
Virginia	14	103	110	95	85	122	25	24	25	29	26	18
Washington	22	186	172	159	233	180	34	8	9	9	6	4
West Virginia	3	(D)	9	9	(D)	(D)	(Z)	(D)	(Z)	(Z)	(D)	(D)
Wisconsin	18	88	72	65	110	105	19	4	5	5	3	3
Wyoming	—	—	—	—	—	—	—	—	—	—	—	—

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. **Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	1 059 133	954	865 561	360	193 572	912 484	16.1	2	2	1
Alabama-----	7 839	(S)	5 671	8	2 168	5 475	43.2	3	(Z)	9
Alaska-----	(D)	1	(D)	(S)	(D)	2 658	(D)	(D)	(D)	(D)
Arizona-----	*9 691	*19	(D)	1	(D)	8 000	21.1	41	(D)	(D)
Arkansas-----	*5 248	*6	(S)	6	816	468	1 021.4	68	(S)	(Z)
California-----	161 795	136	161 151	6	644	139 284	16.2	9	10	(Z)
Colorado-----	(D)	5	(D)	1	(D)	6 640	(D)	(D)	(D)	(D)
Connecticut-----	10 756	14	9 807	4	949	21 178	-49.2	(Z)	(Z)	(Z)
Delaware-----	(D)	4	(D)	5	(D)	672	(D)	(D)	(D)	(D)
District of Columbia-----	(D)	1	(D)	14	(D)	(D)	(D)	(D)	(D)	(D)
Florida-----	20 858	44	17 895	11	2 963	15 777	32.2	17	19	9
Georgia-----	7 301	*18	4 946	11	2 355	23 462	-68.9	13	19	(Z)
Hawaii-----	(D)	3	(D)	—	—	2 636	(D)	(D)	(D)	—
Idaho-----	(D)	1	(D)	3	(D)	1 007	(D)	(D)	(D)	(D)
Illinois-----	86 720	61	81 843	13	4 877	59 018	46.9	4	4	(Z)
Indiana-----	23 263	27	10 270	17	12 993	31 533	-26.2	14	32	2
Iowa-----	13 349	*32	(D)	4	(D)	4 969	168.6	30	(D)	(D)
Kansas-----	3 791	12	1 260	7	2 531	(D)	(D)	4	12	(Z)
Kentucky-----	5 452	8	4 108	11	*1 344	3 545	53.8	17	(Z)	70
Louisiana-----	17 861	13	12 262	11	5 599	9 500	88.0	13	18	(Z)
Maine-----	(D)	(S)	(D)	1	(D)	*1 479	(D)	(D)	(D)	(D)
Maryland-----	34 659	31	29 602	8	5 057	30 909	12.1	4	5	(Z)
Massachusetts-----	31 313	34	29 067	5	2 245	40 716	-23.1	4	4	(Z)
Michigan-----	82 446	55	77 260	8	5 186	59 890	37.7	5	5	(Z)
Minnesota-----	14 797	*17	(D)	2	(D)	*6 342	133.3	6	(D)	(D)
Mississippi-----	819	—	—	5	819	3 754	-78.2	22	—	22
Missouri-----	19 579	15	14 878	13	4 701	16 659	17.5	10	13	1
Montana-----	(D)	—	—	3	(D)	(S)	(D)	(D)	—	(D)
Nebraska-----	3 716	(S)	(D)	4	(D)	(D)	(D)	(Z)	(D)	(D)
Nevada-----	(S)	(S)	(D)	4	(D)	4 546	(S)	(S)	(D)	(D)
New Hampshire-----	4 643	(S)	4 218	*10	*425	5 016	-7.4	11	11	58
New Jersey-----	59 023	35	47 811	15	11 212	46 088	28.1	7	9	(Z)
New Mexico-----	4 019	3	(D)	2	(D)	*4 030	-3	(Z)	(D)	(D)
New York-----	118 573	63	86 077	18	32 496	103 966	14.0	(Z)	(Z)	(Z)
North Carolina-----	12 647	*23	(D)	6	(D)	17 930	-29.5	26	(D)	(D)
North Dakota-----	(D)	—	—	1	(D)	1 028	(D)	(D)	—	(D)
Ohio-----	62 848	48	49 687	15	13 160	27 677	127.1	5	6	1
Oklahoma-----	7 564	*12	(D)	2	(D)	8 142	-7.1	26	(D)	(D)
Oregon-----	10 766	12	7 428	(S)	3 338	8 184	31.6	13	15	25
Pennsylvania-----	58 063	37	32 718	19	25 345	42 575	36.4	3	6	2
Rhode Island-----	6 169	12	5 659	4	510	7 844	-21.3	3	3	(Z)
South Carolina-----	4 928	6	2 258	5	2 670	2 620	88.1	(Z)	(Z)	(Z)
South Dakota-----	(D)	—	—	2	(D)	(D)	(D)	(D)	—	(D)
Tennessee-----	6 049	12	(D)	6	(D)	*10 592	-42.9	(Z)	(D)	(D)
Texas-----	56 610	47	46 090	14	10 520	47 008	20.4	4	5	(Z)
Utah-----	2 121	2	(D)	2	(D)	4 706	-54.9	(Z)	(D)	(D)
Vermont-----	(S)	(S)	(D)	1	(D)	(D)	(D)	(S)	(D)	(D)
Virginia-----	11 834	13	6 520	14	5 314	18 907	-37.4	18	32	4
Washington-----	27 194	22	22 113	9	5 082	19 753	37.7	7	9	2
West Virginia-----	4 854	3	(D)	7	(D)	4 217	15.1	1	(D)	(D)
Wisconsin-----	7 908	18	7 562	4	346	5 513	43.4	7	7	6
Wyoming-----	89	—	—	4	89	(D)	(D)	14	—	14

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	1 113 549	958 834	2	2
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS				
Excavating, earthmoving, and land clearing contractor, not connected with buildings	22 894	(NA)	16	(NA)
SPECIAL TRADE CONTRACTORS				
Concrete breaking for streets and highways contractor	52 754	68 313	7	10
Excavating, earth and land clearing contractor, connected with buildings	22 918	26 620	8	5
Special cases	47 753	(NA)	4	(NA)
Steel tank dismantling contractor	43 797	*5 229	11	41
Wrecking and demolition contractor, buildings and other structures	824 004	749 800	2	1
Other construction activities	43 007	48 841	6	12
OTHER BUSINESS ACTIVITIES				
Rental of construction machinery or equipment to others	7 667	12 826	3	4
Retail trade	22 263	7 174	1	8
Wholesale trade	15 279	(NA)	(Z)	(NA)
Other business activities	9 040	25 935	6	3
Kind of business activity, n.s.k.	2 172	14 095	(Z)	(Z)

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	13.6	11.4	3
Number of construction workers	10.8	9.4	3
Number of all other employees	2.8	2.0	3
Payroll, all employees \$1,000 ..	306.4	210.9	3
Payroll, construction workers do ..	222.1	157.6	3
Payroll, other employees do ..	84.3	53.2	4
Dollar value of business done do ..	1 152.5	773.3	3
Value of construction work do ..	1 096.1	735.9	3
Cost of materials, components, supplies, and fuels	214.6	88.1	3
Construction work subcontracted to others	135.7	54.7	6
Rental cost for machinery, equipment, and buildings	53.9	38.0	11
Capital expenditures, other than land	23.9	33.0	7
Gross book value of depreciable assets	313.5	220.9	6
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	22.6	18.5	1
Dollar value of business done do ..	84.9	68.0	1
Value added†† do ..	59.1	55.4	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	20.6	16.7	1
Value of construction work do ..	101.8	78.1	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	30.1	27.3	2
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.280	.287	1
Cost of materials, components, supplies, and fuels .....	.196	.120	2
Cost of construction work subcontracted out to others .....	.124	.074	4
Value of construction work subcontracted in from others .....	.409	.400	2
Rental cost for machinery, equipment, and buildings .....	.049	.052	10

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	13.6	22.6	101.8	.280	.196	.124	.409	.049
Alabama -----	26.6	15.0	34.4	.493	(D)	.050	.098	(D)
Alaska -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Arizona -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Arkansas -----	6.9	16.6	192.7	.146	.346	.207	(D)	(D)
California -----	13.7	25.3	119.2	.276	.146	.151	.443	.077
Colorado -----	12.6	21.6	140.8	.205	(D)	.057	(D)	.119
Connecticut -----	8.5	22.6	116.0	.260	(D)	.033	.462	.010
Delaware -----	22.3	(D)	79.0	(D)	.356	.099	(D)	.108
District of Columbia -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	10.5	18.0	102.6	.242	(D)	.132	.164	.046
Georgia -----	6.4	13.7	55.0	.321	(D)	.167	.309	.050
Hawaii -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Idaho -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois -----	25.7	21.5	75.4	.349	(D)	.139	.435	.035
Indiana -----	6.6	15.9	82.5	.261	.327	*.032	.180	.012
Iowa -----	4.5	20.1	105.5	.227	(D)	(D)	.119	.008
Kansas -----	4.2	14.1	73.9	.219	.222	.062	.236	.015
Kentucky -----	9.0	19.8	92.6	.266	(D)	(D)	(D)	(D)
Louisiana -----	(D)	(D)	(D)	(D)	(D)	.035	(D)	.023
Maine -----	(S)	(S)	(S)	(S)	(S)	(D)	(D)	(D)
Maryland -----	19.7	21.5	89.8	.299	(D)	.093	.484	.053
Massachusetts -----	10.2	23.4	102.8	.268	.167	.094	.544	(S)
Michigan -----	12.5	32.2	171.1	.242	.161	.158	.452	.056
Minnesota -----	7.8	26.8	129.9	.247	(D)	.138	.568	.094
Mississippi -----	-	-	-	-	-	-	-	-
Missouri -----	10.3	20.2	158.8	.174	.122	.430	.355	.052
Montana -----	-	-	-	-	-	-	-	-
Nebraska -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nevada -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Hampshire -----	8.1	(D)	100.2	(D)	(D)	(D)	(D)	.038
New Jersey -----	20.4	25.3	126.1	.248	(D)	(S)	.475	.028
New Mexico -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New York -----	17.5	23.2	97.0	.288	.165	.102	.350	.045
North Carolina -----	14.0	17.3	87.0	.343	(D)	.323	.151	(D)
North Dakota -----	-	-	-	-	-	-	-	-
Ohio -----	20.9	20.0	87.7	.285	.253	.055	.298	.016
Oklahoma -----	7.7	28.7	138.0	.274	.320	.003	.654	.068
Oregon -----	10.1	15.5	81.3	.235	.226	.038	.235	(S)
Pennsylvania -----	13.9	(D)	118.6	(D)	.166	(D)	.378	.039
Rhode Island -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
South Carolina -----	6.8	15.7	82.3	.270	.239	(D)	.339	.033
South Dakota -----	-	-	-	-	-	-	-	-
Tennessee -----	8.2	14.7	67.1	.267	.200	(D)	.177	.045
Texas -----	14.3	22.8	103.2	.262	.224	.219	.430	.064
Utah -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Vermont -----	(D)	(D)	(D)	.078	.501	-	-	-
Virginia -----	9.0	20.8	70.6	.366	(D)	.077	.625	.032
Washington -----	10.6	31.7	123.2	.323	(D)	.077	.629	.053
West Virginia -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Wisconsin -----	6.3	24.7	127.5	.251	.169	.106	.049	.039
Wyoming -----	-	-	-	-	-	-	-	-

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

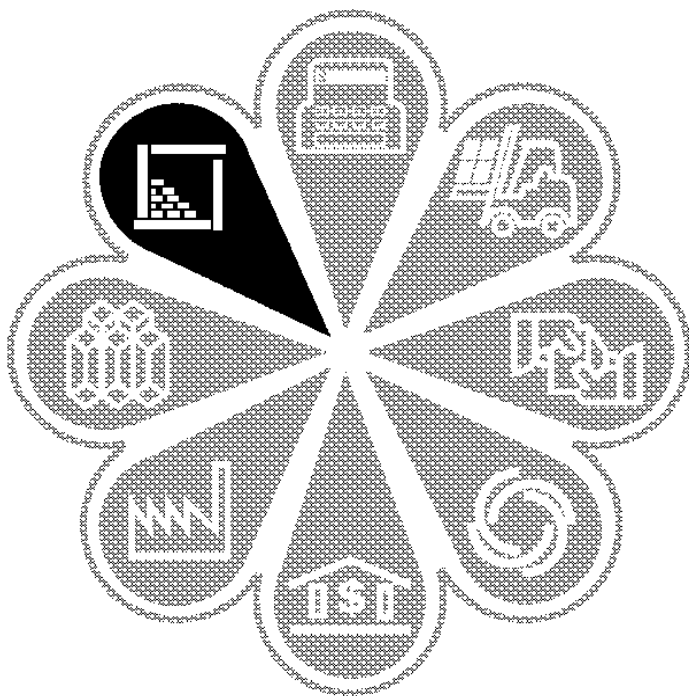
Census of Construction Industries

CC92-I-25

INDUSTRY SERIES

Installation or Erection of Building Equipment Special Trade Contractors, Not Elsewhere Classified

Industry 1796



1992

Census of

Construction Industries

CC92-I-25

INDUSTRY SERIES

Installation or Erection of

Building Equipment

Special Trade Contractors,

Not Elsewhere Classified

Industry 1796

Issued August 1995



U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the "value of construction work" was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year—buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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Summary of Findings

Establishments classified in this industry are primarily engaged in the installation or erection of building equipment, not elsewhere classified, such as elevators, escalators, pneumatic tube systems, and dust collection equipment. This industry also includes contractors primarily engaged in the installation or dismantling of machinery or other industrial equipment. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$6.8 billion in total dollar value of business. Of this amount, \$6.6 billion were for the value of construction work. These establishments paid out \$1.7 billion for materials, components, and supplies and \$479 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$77 million. Value added for 1992 was \$4.5 billion.

There were 3,889 establishments with total employment averaging 82,648 during the year. Total payroll for 1992 was \$2.3 billion.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Larger establishments with 20 employees or more, while representing only 23 percent of the total number of employer establishments in this industry accounted for 78 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

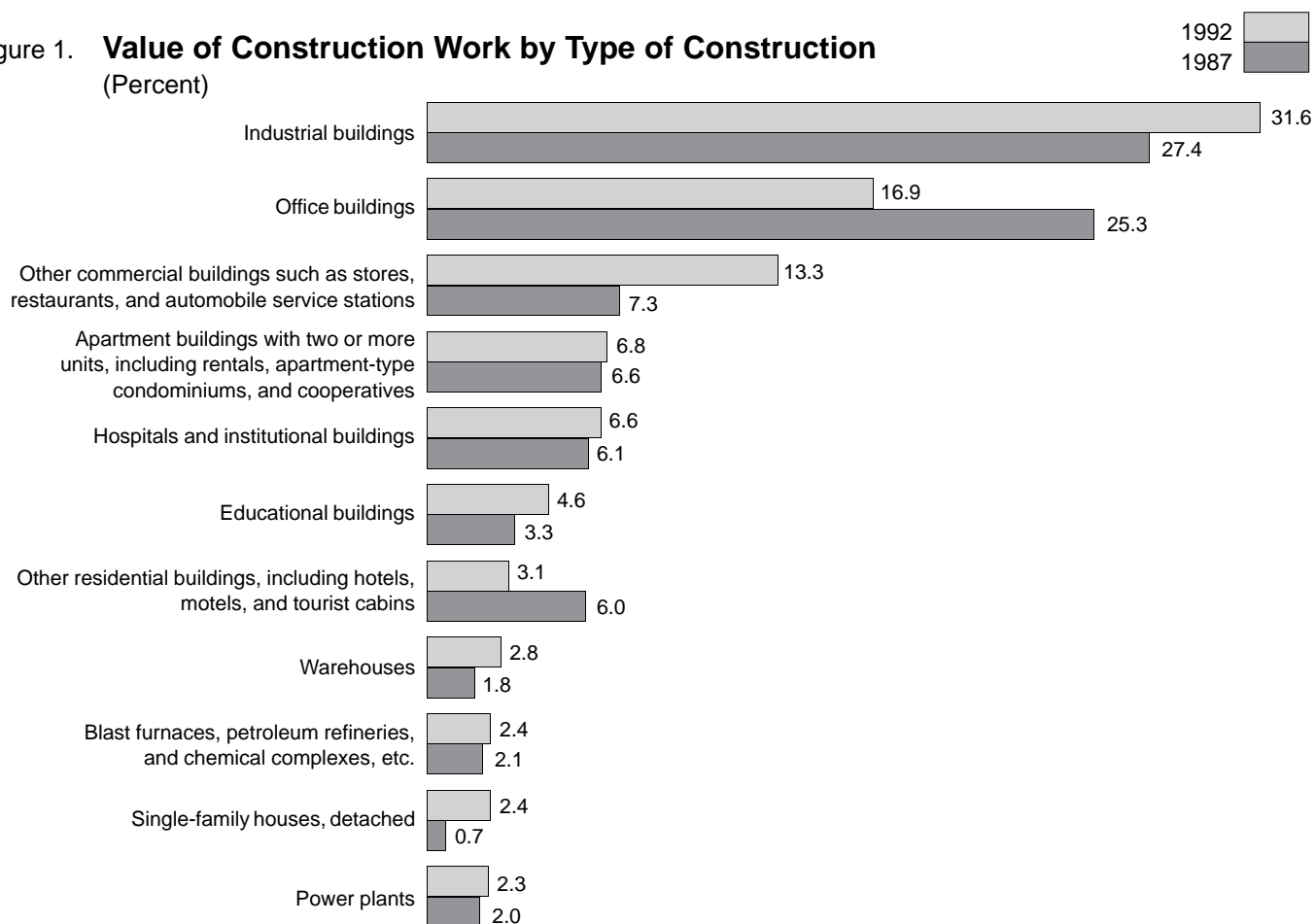


Figure 2. **Selected Costs per Dollar Value of Business Done**
(Percent)

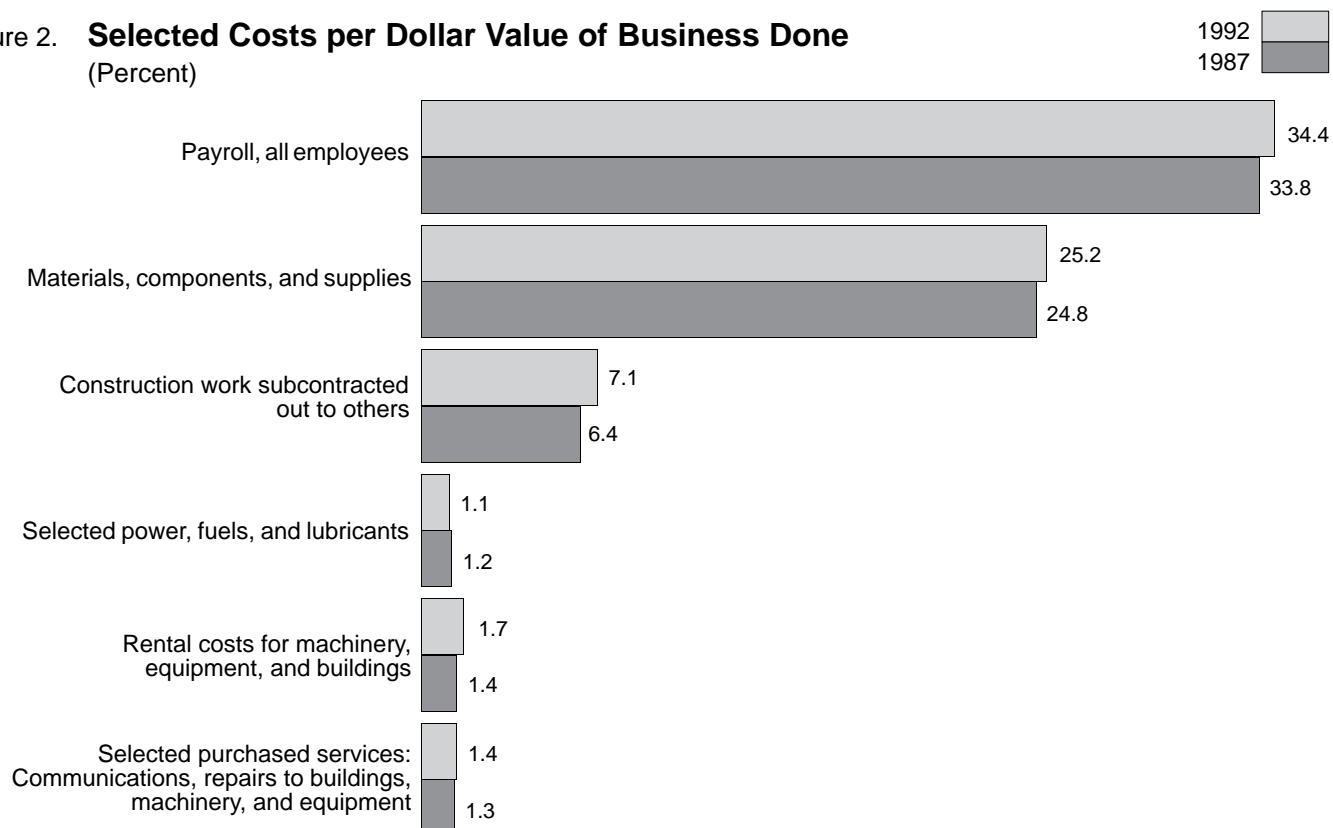


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	3 889	82 648	64 380	2 324 139	1 742 093	6 611 040	6 132 131	4 494 378	1 776 845
Alabama -----	55	1 235	1 023	27 889	21 508	66 569	64 109	46 959	(D)
Alaska -----	8	75	55	1 705	1 196	4 585	(D)	3 146	(D)
Arizona -----	32	444	313	13 007	10 399	61 072	(D)	28 774	(D)
Arkansas -----	45	939	803	24 915	20 436	68 837	64 102	47 878	(D)
California -----	341	7 837	6 153	249 485	187 556	671 462	640 414	468 055	178 865
Colorado -----	45	777	607	23 082	18 583	55 614	54 976	37 480	17 570
Connecticut -----	48	1 020	790	26 813	19 769	73 544	71 372	58 541	12 837
Delaware -----	12	133	92	3 995	3 393	(S)	(S)	(S)	(S)
District of Columbia -----	3	(D)	64	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	169	4 603	3 609	116 464	88 234	351 920	(D)	196 967	79 577
Georgia -----	111	2 270	1 722	51 559	36 921	157 803	150 874	102 391	54 435
Hawaii -----	19	922	729	20 136	16 095	67 345	66 708	48 914	19 080
Idaho -----	6	115	70	(D)	1 579	(D)	9 135	(D)	(D)
Illinois -----	171	4 440	3 416	150 274	107 978	406 473	382 993	266 382	120 574
Indiana -----	95	1 327	1 040	40 982	31 351	103 605	94 453	75 675	22 203
Iowa -----	54	663	518	16 437	12 574	50 777	46 340	36 842	11 225
Kansas -----	64	1 132	916	31 937	24 272	79 920	(D)	61 461	17 930
Kentucky -----	73	1 556	1 203	40 642	29 124	121 349	112 099	75 429	38 519
Louisiana -----	59	1 276	930	34 606	25 212	88 272	81 456	59 139	27 208
Maine -----	23	409	328	6 172	4 848	13 896	13 475	10 709	(D)
Maryland -----	93	2 123	1 684	70 626	55 278	213 214	203 465	146 385	60 458
Massachusetts -----	121	2 786	2 167	76 995	57 208	223 823	217 119	164 174	54 508
Michigan -----	160	4 017	3 236	82 270	61 784	248 497	222 685	171 430	62 587
Minnesota -----	79	1 591	1 221	50 167	35 657	153 434	146 372	117 924	37 873
Mississippi -----	26	443	369	10 679	8 427	25 536	25 141	19 498	(D)
Missouri -----	80	914	689	29 322	21 993	73 844	70 377	49 247	(D)
Montana -----	10	138	119	2 736	2 454	7 002	6 944	5 595	1 349
Nebraska -----	25	411	262	8 516	5 949	22 623	22 264	17 059	6 052
Nevada -----	17	285	219	9 323	6 752	40 944	40 749	24 465	16 284
New Hampshire -----	16	282	215	7 022	5 272	23 168	22 203	16 179	6 306
New Jersey -----	138	2 814	2 015	101 659	72 363	324 809	295 763	184 069	112 968
New Mexico -----	16	314	263	5 191	3 991	14 103	(D)	9 172	4 518
New York -----	307	6 830	5 141	250 761	182 574	629 624	606 071	458 732	150 706
North Carolina -----	114	2 232	1 734	51 275	38 602	157 983	149 660	103 113	48 437
North Dakota -----	14	197	156	2 229	1 599	7 653	7 124	4 685	2 440
Ohio -----	178	4 651	3 740	121 798	94 279	326 555	310 460	232 852	81 472
Oklahoma -----	34	705	592	13 689	11 237	44 963	(D)	30 440	14 438
Oregon -----	81	769	599	20 449	15 984	50 449	47 912	37 294	10 617
Pennsylvania -----	191	6 165	4 964	185 826	147 608	548 938	471 718	384 015	100 871
Rhode Island -----	14	120	87	4 075	2 730	9 085	9 005	7 834	1 208
South Carolina -----	51	1 209	949	25 780	20 211	58 007	55 718	43 600	(D)
South Dakota -----	16	97	66	1 985	1 306	5 418	5 149	3 460	1 689
Tennessee -----	98	2 129	1 664	49 250	37 646	153 501	136 659	93 342	49 270
Texas -----	268	4 478	3 451	106 379	75 355	312 571	302 071	202 271	107 346
Utah -----	37	288	222	6 476	5 350	26 229	26 000	15 340	10 985
Vermont -----	3	27	20	1 003	(D)	(D)	3 589	2 068	(D)
Virginia -----	78	2 317	1 830	60 210	46 984	185 399	175 488	130 520	51 177
Washington -----	67	1 289	997	36 318	27 107	119 897	113 287	86 139	27 246
West Virginia -----	18	169	144	4 301	3 679	12 942	12 856	7 048	5 808
Wisconsin -----	98	1 526	1 148	40 029	27 114	109 229	105 653	79 896	30 031
Wyoming -----	*9	(D)	40	(D)	1 499	3 916	3 916	2 545	1 371

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
478 909	1 806 984	116 126	71 517	721 129	62 151	5 359 826	3 723 074	1	(Z)	3	U.S.
2 461	14 422	1 436	*989	13 359	1 239	68 409	49 915	6	6	62	AL
(D)	1 918	66	(D)	(D)	47	7 220	5 086	(Z)	(D)	(D)	AK
(D)	7 253	455	481	3 179	519	44 057	24 848	5	(D)	(Z)	AZ
4 734	9 386	1 616	1 443	12 705	524	29 613	20 910	3	2	9	AR
31 048	204 526	17 495	5 910	65 071	5 441	523 790	376 610	2	1	2	CA
638	20 771	1 061	582	4 376	633	53 020	36 798	1	1	(Z)	CO
2 172	26 190	1 302	389	8 782	823	80 494	56 926	3	3	(Z)	CT
565	(S)	(S)	59	1 855	252	18 740	12 284	(Z)	(S)	(Z)	DE
(D)	(D)	(D)	(D)	(D)	(D)	7 966	6 064	(D)	(D)	(D)	DC
(D)	75 896	3 733	2 642	29 094	2 510	210 392	136 709	2	(D)	5	FL
6 929	45 793	2 171	1 206	17 671	1 824	143 324	103 427	2	1	(Z)	GA
637	22 324	708	(D)	4 042	331	35 064	24 533	4	1	(D)	HI
(D)	5 922	(D)	116	(D)	(D)	6 135	3 167	(Z)	(Z)	(Z)	ID
23 480	103 707	6 768	4 505	36 797	3 834	310 011	217 480	2	1	13	IL
9 152	18 535	2 085	3 295	23 410	1 519	113 985	87 640	4	4	29	IN
4 437	7 631	710	869	7 522	682	45 644	28 595	6	6	(Z)	IA
(D)	4 096	1 180	1 378	7 585	1 183	68 578	45 326	5	(D)	26	KS
9 250	39 862	2 560	2 270	20 724	1 085	71 052	51 755	4	2	(Z)	KY
6 817	17 041	1 747	*986	11 768	1 068	68 544	52 749	4	7	40	LA
421	2 296	171	*210	2 126	150	14 951	9 563	6	9	44	ME
9 750	89 586	2 236	865	9 282	1 675	140 957	97 035	3	4	35	MD
6 705	62 719	3 513	*1 727	12 354	1 618	150 103	105 236	2	2	44	MA
25 812	61 902	5 032	2 150	42 930	2 933	263 255	170 459	3	2	5	MI
7 062	46 661	2 386	2 202	15 856	974	88 276	59 149	3	3	23	MN
394	5 012	387	482	(D)	436	41 979	25 837	10	8	(Z)	MS
3 468	19 759	1 461	1 082	8 396	822	65 086	44 696	5	5	13	MO
58	*3 281	72	(D)	*1 032	84	7 699	5 219	20	24	(D)	MT
359	11 401	265	716	5 054	358	22 374	17 243	8	5	(Z)	NE
195	11 912	606	(S)	(S)	121	14 982	10 537	(Z)	(Z)	(S)	NV
965	12 048	244	159	1 531	162	16 844	10 525	1	1	(Z)	NH
29 046	64 880	4 863	1 327	23 396	3 084	339 190	224 164	1	1	(Z)	NJ
(D)	7 577	187	*148	2 473	49	5 082	3 933	11	(D)	59	NM
23 553	165 165	9 845	4 590	60 441	6 952	600 546	438 018	2	1	5	NY
8 323	47 297	2 170	1 078	18 733	1 319	113 296	81 046	4	2	(Z)	NC
529	1 588	62	15	1 668	118	10 974	6 825	10	29	(Z)	ND
16 095	86 371	5 695	4 939	28 827	2 655	219 415	162 322	2	2	2	OH
(D)	9 420	498	290	2 067	279	22 697	17 533	3	(D)	3	OK
2 537	9 498	1 367	432	*6 756	829	62 380	44 394	9	5	1	OR
77 221	140 641	11 662	4 415	35 421	3 524	342 500	266 631	1	1	8	PA
80	1 432	63	40	721	114	13 140	8 748	2	1	(Z)	RI
2 288	14 079	916	1 305	12 970	677	37 322	27 610	5	5	4	SC
269	3 197	81	(D)	485	*128	5 495	3 851	3	1	(D)	SD
16 842	27 645	2 897	3 074	29 435	1 705	141 128	87 412	3	3	5	TN
10 500	75 775	4 980	3 607	32 230	3 508	266 297	197 318	2	2	14	TX
229	*15 490	*748	*1 206	*5 512	152	11 704	7 817	30	24	48	UT
(D)	(D)	(D)	(D)	(D)	*68	6 440	4 013	(Z)	(Z)	(D)	VT
9 911	82 095	4 468	2 594	37 123	1 202	105 333	73 130	1	3	6	VA
6 611	49 056	2 068	1 176	7 743	716	66 422	41 416	3	2	39	WA
86	2 414	121	(D)	(D)	202	33 729	14 444	(Z)	(Z)	(D)	WV
3 576	44 640	1 611	2 665	27 475	1 797	223 149	115 496	5	4	3	WI
—	(D)	(D)	64	(D)	(D)	(S)	(S)	(D)	13	34	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	3 889	3 777	3 754	2 442	2	2	2	2
Proprietors and working partners	574	371	629	598	7	11	7	10
All employees**	82 648	62 151	60 169	40 474	1	1	1	1
Construction workers:								
March	67 104	50 527	49 239	31 300	(Z)	1	1	1
May	58 918	49 840	48 732	32 085	1	1	1	1
August	65 180	50 641	48 682	33 688	1	1	1	1
November	66 319	49 986	48 487	33 334	1	1	1	1
Average	64 380	50 244	49 101	32 630	1	1	1	1
Other employees:								
March	18 172	11 801	11 058	7 774	1	1	1	1
May	17 655	11 939	(NA)	(NA)	1	1	(NA)	(NA)
August	17 835	11 765	(NA)	(NA)	1	1	(NA)	(NA)
November	19 410	12 107	(NA)	(NA)	1	1	(NA)	(NA)
Average	18 268	11 906	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	2 324 139	1 857 748	1 449 266	752 439	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	1 742 093	1 447 481	1 144 755	601 593	(Z)	1	(Z)	(Z)
Payroll, other employees	582 046	410 266	304 511	150 846	(Z)	1	(Z)	(Z)
First-quarter payroll, all employees	586 784	463 654	353 004	172 374	1	1	(Z)	(Z)
Fringe benefits, all employees	752 079	460 503	302 273	155 442	1	1	(Z)	1
Legally required expenditures	406 879	248 320	182 602	76 258	1	1	(Z)	1
Voluntary expenditures	345 200	212 183	119 671	79 184	1	1	(Z)	1
Dollar value of business done	6 750 132	5 502 934	4 255 801	1 947 041	(Z)	1	(Z)	1
Value of construction work	6 611 040	5 359 826	4 189 275	1 899 047	(Z)	1	(Z)	1
Value of construction work subcontracted in from others	1 806 984	1 489 221	1 798 884	635 660	2	1	(Z)	(Z)
Other business receipts	139 092	143 107	66 526	47 995	4	2	3	2
Net value of construction work†	6 132 131	5 009 764	3 970 612	1 829 175	(Z)	1	(Z)	(Z)
Value added††	4 494 378	3 723 074	2 952 049	1 385 046	(Z)	1	(Z)	(Z)
Selected costs	2 255 754	1 779 859	1 303 752	561 995	1	1	1	1
Materials, components, and supplies	1 699 555	1 363 562	1 038 708	469 172	1	1	1	1
Construction work subcontracted out to others	478 909	350 061	218 663	69 872	1	1	1	4
Selected power, fuels, and lubricants	77 290	66 236	46 381	22 952	1	1	1	1
Electricity	13 722	11 696	7 863	3 335	1	1	2	1
Natural and manufactured gas	4 304	3 388	2 457	1 412	1	2	3	1
Gasoline and diesel fuel	53 113	47 437	32 337	15 050	1	1	2	1
On highway use	47 084	42 714	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	6 029	4 722	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases	6 151	3 714	3 722	3 157	2	1	2	2
Rental cost for machinery, equipment, and buildings	116 126	76 798	43 718	23 037	1	1	1	1
For machinery and equipment	56 897	43 227	26 078	15 119	2	2	1	1
For buildings	59 229	33 570	17 640	7 919	2	2	2	1
Selected purchased services	92 141	71 274	49 356	27 171	2	1	1	1
Communication services	45 674	36 846	24 902	12 725	1	1	1	1
Repairs to buildings and other structures	5 303	5 770	4 176	1 884	5	2	2	1
Repairs to machinery and equipment	41 164	28 656	20 277	12 563	2	2	2	1
Ownership of construction projects:								
Value of construction work	6 611 040	5 359 826	4 189 275	1 899 047	(Z)	1	(Z)	1
Government owned	1 046 049	444 611	348 489	212 739	2	3	3	1
Federal	325 381	117 728	(NA)	(NA)	5	9	(NA)	(NA)
State and local	720 668	326 882	(NA)	(NA)	2	3	(NA)	(NA)
Privately owned	5 564 991	4 915 215	3 840 785	1 686 308	1	1	(Z)	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	675 802	394 698	2	2
Capital expenditures, other than land -----	71 517	49 079	3	3
New -----	55 107	36 442	3	3
Used -----	16 411	12 637	3	8
Retirements and disposition of depreciable assets -----	26 191	17 458	2	3
End-of-year gross book value of depreciable assets -----	721 129	426 319	2	2
Depreciation charges during year -----	72 052	46 511	2	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	102 476	83 263	4	4
Capital expenditures, other than land -----	6 632	7 849	3	10
New buildings and other structures -----	5 092	3 967	3	8
Used buildings and other structures -----	1 540	3 882	7	19
Retirements and disposition of depreciable assets -----	1 636	3 570	3	4
End-of-year gross book value of depreciable assets -----	107 472	87 543	3	4
Depreciation charges during year -----	6 633	6 901	4	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	573 326	311 435	2	2
Capital expenditures, other than land -----	64 886	41 230	3	3
New machinery and equipment, including automobiles and trucks -----	50 015	32 475	4	3
New automobiles and trucks, intended primarily for highway use -----	16 641	16 742	3	4
Used machinery and equipment, including automobiles and trucks -----	14 871	8 754	3	6
Retirements and disposition of depreciable assets -----	24 555	13 888	3	3
End-of-year gross book value of depreciable assets -----	613 657	338 776	2	2
Depreciation charges during year -----	65 418	39 609	2	3

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	3 889	2
Value of construction work	6 611 040	(Z)
Establishments with inventories:		
Number	1 272	2
Value of construction work	3 677 708	(Z)
Inventories ¹ :		
End of 1992, materials and supplies	130 909	2
End of 1991, materials and supplies	94 894	2
Establishments with no inventories:		
Number	1 197	3
Value of construction work	1 847 114	1
Establishments not reporting:		
Number	1 420	3
Value of construction work	1 086 218	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments	3 889	1 358	948	699	528	215	111	15	15	1
All employees**	82 648	2 736	6 330	9 609	15 940	15 175	15 621	5 022	12 216	(D)
Payroll, all employees	2 324 139	64 017	154 454	277 233	543 225	483 400	450 532	108 749	242 529	(D)
Dollar value of business done	6 750 132	226 574	482 692	774 659	1 487 513	1 331 905	1 145 142	415 880	885 768	(D)
Value of construction work	6 611 040	223 873	469 422	757 340	1 461 481	1 285 867	1 130 064	410 557	872 436	(D)
Net value of construction work†	6 132 131	210 351	441 446	724 675	1 391 828	1 178 202	1 068 081	1 117 547	(D)	(D)
Value added††	4 494 378	151 302	313 963	536 272	1 019 565	873 750	772 724	257 812	568 989	(D)
Cost of materials, components, supplies, and fuels	1 776 845	61 750	140 752	205 722	398 294	350 490	310 435	309 401	(D)	(D)
Cost of construction work subcontracted out to others	478 909	13 522	27 976	32 664	69 653	107 665	61 983	165 446	(D)	(D)
Rental cost for machinery, equipment, and buildings	116 126	5 329	11 215	15 104	26 763	26 382	16 626	3 370	11 337	(D)
Capital expenditures, other than land	71 517	4 639	9 845	12 147	13 867	16 574	9 113	2 765	2 566	(D)
End-of-year gross book value of depreciable assets	721 129	38 210	74 049	107 006	168 363	185 676	121 210	15 515	11 100	(D)
1987										
All employees**	62 151	3 263	5 269	8 776	14 744	10 802	12 277	4 064	2 951	(D)
Value of construction work	5 359 826	309 546	404 828	726 342	1 157 418	953 067	1 066 110	742 513	(D)	(D)
Value added††	3 723 074	220 893	291 264	509 979	840 079	655 895	724 856	252 267	227 840	(D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees**	1	5	4	2	1	1	(Z)	(Z)	(Z)	(D)
Net value of construction work†	(Z)	5	4	2	1	(Z)	(Z)	(Z)	(D)	(D)
Capital expenditures, other than land	3	13	15	8	1	(Z)	(Z)	(Z)	(Z)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	3 889	(S)	(S)	318	752	629	627	654	264	188	116
All employees** -----	82 648	(S)	(S)	885	3 554	5 645	8 547	13 415	10 844	12 506	26 866
Payroll, all employees -----	2 324 139	(S)	(S)	9 089	46 678	86 250	162 919	383 903	345 314	488 128	799 068
Dollar value of business done -----	6 750 132	(S)	(S)	23 224	126 220	230 754	440 535	1 024 636	905 250	1 292 727	2 698 505
Value of construction work -----	6 611 040	(S)	(S)	23 167	125 155	228 151	431 982	998 401	880 044	1 262 947	2 652 929
Net value of construction work† -----	6 132 131	(S)	(S)	22 753	121 470	219 000	414 819	952 610	829 067	1 194 549	2 369 810
Value added†† -----	4 494 378	(S)	(S)	16 605	88 902	161 000	304 149	716 227	626 495	879 848	1 695 290
Cost of materials, components, supplies, and fuels -----	1 776 845	(S)	(S)	6 205	33 633	60 603	119 222	262 618	227 778	344 481	720 096
Cost of construction work subcontracted out to others -----	478 909	(S)	(S)	414	3 685	9 151	17 163	45 791	50 977	68 398	283 119
Rental cost for machinery, equipment, and buildings -----	116 126	(S)	(S)	383	3 003	7 048	9 434	20 109	17 760	24 055	34 151
Capital expenditures, other than land -----	71 517	(S)	(S)	583	2 512	4 625	9 147	12 410	11 053	15 463	15 458
End-of-year gross book value of depreciable assets -----	721 129	(S)	(S)	3 902	23 042	39 409	65 810	128 429	117 524	157 147	183 746
1987											
All employees** -----	62 151	(S)	(S)	(S)	2 260	3 923	5 915	12 310	9 305	11 172	15 868
Value of construction work -----	5 359 826	(S)	(S)	(S)	114 532	227 916	437 739	947 903	832 434	976 202	1 789 427
Value added†† -----	3 723 074	(S)	(S)	(S)	85 548	162 384	319 608	692 721	600 302	705 317	1 132 000
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	6	5	3	3	1	1	(Z)	(Z)
Net value of construction work† -----	(Z)	(S)	(S)	9	6	5	4	2	1	(Z)	(Z)
Capital expenditures, other than land -----	3	(S)	(S)	32	19	22	13	7	2	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	6 611 040	2 182 760	1 419 832	2 987 484	(Z)	1	1	(Z)
Building construction	6 137 551	2 066 208	1 251 561	2 819 783	(Z)	1	1	(Z)
Single-family houses	196 915	122 883	34 423	39 609	3	3	10	2
Single-family houses, detached	155 774	115 286	24 096	16 393	3	3	11	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	41 141	7 597	10 327	23 217	8	19	23	1
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	451 177	97 213	100 239	253 725	(Z)	1	(Z)	1
Other residential buildings, including hotels, motels, and tourist cabins	204 407	58 617	20 593	125 197	(Z)	(Z)	(Z)	(Z)
Office buildings	1 120 522	285 535	167 237	667 751	(Z)	(Z)	1	(Z)
Other commercial buildings such as stores, restaurants, and automobile service stations	880 592	269 335	96 767	514 490	1	1	2	(Z)
Industrial buildings and warehouses	2 275 417	794 231	706 207	774 979	1	1	2	1
Industrial buildings	2 087 931	722 249	670 677	695 005	1	1	2	1
Warehouses	187 486	71 982	35 530	79 974	4	7	4	3
Religious buildings	63 034	24 344	6 558	32 132	1	2	8	(Z)
Educational buildings	303 545	155 465	28 254	119 827	1	2	2	(Z)
Hospitals and institutional buildings	436 446	155 537	59 359	221 550	1	1	3	1
Farm buildings, nonresidential	40 284	19 674	6 102	14 508	12	12	18	15
Amusement, social, and recreational buildings, indoors	83 806	23 963	8 948	50 894	2	3	14	1
Other nonresidential buildings	81 406	59 412	16 873	(S)	4	5	6	(S)
Nonbuilding construction	452 525	116 552	168 272	167 701	2	6	2	4
Recreational facilities	34 409	29 863	1 921	*2 624	19	19	29	47
Blast furnaces, petroleum refineries, chemical complexes, etc.	156 539	28 685	45 352	82 502	2	4	4	2
Power plants	151 499	5 552	(D)	(D)	4	12	(D)	(D)
Other nonbuilding construction	110 079	52 452	(D)	(D)	4	5	(D)	(D)
Construction work, n.s.k.	20 964	(NA)	(NA)	(NA)	12	(NA)	(NA)	(NA)
1987								
Value of construction work	5 359 826	2 170 867	807 322	2 199 510	1	1	1	1
Building construction	4 722 281	2 009 445	671 399	2 041 436	1	1	1	1
Single-family houses	45 557	28 786	11 172	5 598	10	14	17	22
Single-family houses, detached	38 774	24 667	9 740	4 365	12	15	19	28
Single-family houses, attached, including townhouses and townhouse-type condominiums	6 783	4 118	1 431	1 233	19	30	6	4
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	354 018	104 595	42 140	207 282	1	2	(Z)	(Z)
Other residential buildings, including hotels, motels, and tourist cabins	320 264	132 090	28 908	159 264	2	2	6	2
Office buildings	1 356 025	614 524	77 885	663 616	(Z)	(Z)	3	1
Other commercial buildings such as stores, restaurants, and automobile service stations	389 140	168 914	65 746	154 479	3	3	9	1
Industrial buildings and warehouses	1 565 427	712 069	373 036	480 321	2	3	1	2
Industrial buildings	1 468 750	662 636	353 945	452 168	2	3	1	2
Warehouses	96 676	49 433	19 090	28 152	2	2	3	4
Religious buildings	32 447	15 092	3 205	14 149	2	4	2	1
Educational buildings	179 239	70 367	13 097	95 774	2	1	10	2
Hospitals and institutional buildings	325 182	114 234	38 273	172 675	(Z)	(Z)	2	1
Farm buildings, nonresidential	29 913	9 138	8 402	12 371	23	23	33	20
Amusement, social, and recreational buildings, indoors	46 608	10 824	2 654	33 129	2	6	9	(Z)
Other nonresidential buildings	78 461	28 812	6 881	42 778	4	(Z)	24	5
Nonbuilding construction	455 418	161 421	135 923	158 074	2	5	2	3
Blast furnaces, petroleum refineries, chemical complexes, etc.	114 325	41 087	36 552	36 685	7	15	3	9
Power plants	105 104	26 024	41 306	37 772	2	2	1	3
Other nonbuilding construction	235 989	94 310	58 064	83 616	(NA)	(NA)	(NA)	(NA)
Construction work, n.s.k.	182 127	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H	B	D	H	
All establishments -----	3 889	82 648	2 324 139	6 611 040	3 935 141	6 132 131	4 494 378	478 909	1	(Z)	1
Establishments not specializing by type -----	711	21 924	767 363	2 187 298	(NA)	2 062 312	1 392 052	124 986	1	1	1
Establishments specializing 51 percent or more -----	3 179	60 724	1 556 776	4 423 742	3 935 141	4 069 819	3 102 327	353 923	1	1	1
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	166	992	29 671	136 935	130 415	(D)	80 319	(D)	5	3	(D)
Establishments with —											
100 percent specialization -----	74	598	20 127	102 520	102 520	(D)	60 096	(D)	2	1	(D)
90 to 99 percent specialization -----	37	159	3 955	14 319	13 404	13 815	7 228	(S)	23	24	(S)
80 to 89 percent specialization -----	35	73	1 247	4 262	3 482	4 160	*2 992	*102	37	34	60
70 to 79 percent specialization -----	14	118	3 013	11 435	8 421	11 207	6 736	(S)	21	20	(S)
60 to 69 percent specialization -----	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
51 to 59 percent specialization -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type -----	106	2 106	87 985	218 108	172 271	208 396	164 734	9 712	(Z)	(Z)	(Z)
Establishments with —											
100 percent specialization -----	37	438	16 468	54 481	54 481	53 119	42 019	1 362	(Z)	(Z)	(Z)
90 to 99 percent specialization -----	8	198	8 637	20 594	18 803	20 264	17 017	330	(Z)	(Z)	(Z)
80 to 89 percent specialization -----	16	370	16 754	41 498	34 503	(D)	28 150	(D)	(Z)	(Z)	(D)
70 to 79 percent specialization -----	13	271	11 361	26 555	19 380	26 377	20 795	178	(Z)	(Z)	(Z)
60 to 69 percent specialization -----	27	586	25 892	56 815	35 110	53 999	42 841	2 816	(Z)	(Z)	(Z)
51 to 59 percent specialization -----	5	244	8 873	18 165	9 994	(D)	13 912	(D)	(Z)	(Z)	(D)
OFFICE BUILDINGS											
All establishments specializing in type -----	194	7 537	227 064	641 870	483 669	630 864	469 969	11 005	(Z)	(Z)	(Z)
Establishments with —											
100 percent specialization -----	65	1 744	46 628	137 790	137 790	134 994	97 265	2 796	1	1	(Z)
90 to 99 percent specialization -----	12	427	13 346	30 184	27 604	(D)	20 256	(D)	3	6	(D)
80 to 89 percent specialization -----	13	194	6 436	15 826	12 980	(D)	12 440	(D)	(Z)	(Z)	(D)
70 to 79 percent specialization -----	27	2 469	67 857	200 084	147 973	197 806	149 791	2 278	(Z)	(Z)	(Z)
60 to 69 percent specialization -----	50	2 041	62 745	182 466	115 152	180 191	133 326	2 275	2	1	1
51 to 59 percent specialization -----	27	662	30 053	75 519	42 169	73 274	56 892	2 245	(Z)	(Z)	(Z)
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	546	17 074	238 499	618 157	544 149	604 476	469 833	13 681	(Z)	1	1
Establishments with —											
100 percent specialization -----	463	13 725	168 212	376 687	376 687	365 649	299 318	11 038	1	1	2
90 to 99 percent specialization -----	12	(D)	4 573	12 135	11 661	(D)	8 916	(D)	(D)	16	(D)
80 to 89 percent specialization -----	16	1 043	18 752	70 086	56 529	69 084	50 011	1 002	1	1	1
70 to 79 percent specialization -----	*16	265	11 622	30 514	21 880	29 770	20 885	744	8	4	(Z)
60 to 69 percent specialization -----	31	(D)	26 945	105 707	64 603	105 405	74 120	302	(D)	2	25
51 to 59 percent specialization -----	7	149	8 395	23 028	12 790	(D)	16 583	(D)	(Z)	(Z)	(D)
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	1 447	24 666	740 690	2 042 960	1 908 240	1 814 042	1 445 829	228 919	1	1	2
Establishments with —											
100 percent specialization -----	1 252	18 160	538 579	1 467 046	1 467 046	1 318 834	1 032 402	148 212	2	1	2
90 to 99 percent specialization -----	32	907	31 380	77 349	72 614	67 833	62 110	9 515	3	3	2
80 to 89 percent specialization -----	56	1 908	67 640	236 207	197 954	(D)	163 149	(D)	2	1	(D)
70 to 79 percent specialization -----	37	977	28 819	60 051	44 056	55 270	39 972	4 780	2	4	3
60 to 69 percent specialization -----	62	2 576	70 480	190 563	120 201	183 525	140 760	7 037	3	3	5
51 to 59 percent specialization -----	8	138	3 793	11 745	6 369	(D)	7 436	(D)	(Z)	(Z)	(D)
WAREHOUSES											
All establishments specializing in type -----	175	1 680	37 136	119 306	113 590	106 968	85 205	12 338	6	6	14
Establishments with —											
100 percent specialization -----	139	1 417	31 130	95 821	95 821	(D)	72 146	(D)	7	7	(D)
90 to 99 percent specialization -----	7	63	1 620	(D)	6 499	(D)	4 602	(D)	(Z)	(D)	(D)
80 to 89 percent specialization -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
70 to 79 percent specialization -----	7	76	2 431	9 097	6 789	(D)	4 406	(D)	39	15	(D)
60 to 69 percent specialization -----	(S)	107	1 710	*6 745	*4 114	5 899	3 406	(S)	30	43	(S)
51 to 59 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
BLAST FURNACES, PETROLEUM REFINERIES, CHEMICAL COMPLEXES, ETC.											
All establishments specializing in type -----	57	1 688	56 285	113 799	99 066	103 034	88 793	10 765	4	3	4
Establishments with —											
100 percent specialization -----	35	947	25 925	50 035	50 035	44 706	36 121	5 330	4	4	6
90 to 99 percent specialization -----	5	220	11 654	25 251	23 472	23 557	22 012	1 694	(Z)	(Z)	(Z)
80 to 89 percent specialization -----	—	—	—	—	—	—	—	—	—	—	—
70 to 79 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
60 to 69 percent specialization -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
51 to 59 percent specialization -----	*12	*105	*2 523	*6 151	*3 575	(D)	5 468	(D)	48	44	(D)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	3 889	64 380	67 104	58 918	65 180	66 319	2	1	(Z)	1	1	1
Alabama	55	1 023	954	1 062	1 009	1 066	11	5	8	5	5	4
Alaska	8	55	44	47	58	70	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Arizona	32	313	299	300	317	334	23	7	8	5	7	7
Arkansas	45	803	721	807	742	944	18	3	4	3	3	3
California	341	6 153	6 898	5 730	5 978	6 004	7	2	1	2	2	3
Colorado	45	607	505	501	645	777	17	1	3	1	1	1
Connecticut	48	790	681	707	857	915	4	3	4	3	4	2
Delaware	12	92	73	91	81	121	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
District of Columbia	3	64	(D)	71	(D)	(Z)	(Z)	(Z)	(Z)	(D)	(D)	(D)
Florida	169	3 609	3 781	3 097	4 108	3 452	10	2	2	2	1	2
Georgia	111	1 722	2 006	1 401	1 714	1 770	10	2	1	3	4	2
Hawaii	19	729	790	644	711	772	9	4	4	5	5	4
Idaho	6	70	61	81	65	71	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Illinois	171	3 416	3 690	3 145	3 359	3 469	6	2	2	3	2	2
Indiana	95	1 040	1 030	1 038	1 052	1 041	15	4	3	5	6	4
Iowa	54	518	444	480	593	555	6	6	6	5	8	4
Kansas	64	916	882	912	924	946	17	4	5	4	4	4
Kentucky	73	1 203	1 019	1 081	1 396	1 315	18	5	3	2	8	7
Louisiana	59	930	790	893	1 001	1 036	13	3	2	7	2	2
Maine	23	328	215	301	369	425	34	8	7	9	7	6
Maryland	93	1 684	1 709	1 660	1 689	1 679	13	3	3	3	2	2
Massachusetts	121	2 167	2 582	1 918	2 074	2 095	10	2	1	2	2	2
Michigan	160	3 236	3 271	2 833	3 408	3 433	11	3	2	2	6	3
Minnesota	79	1 221	1 964	923	1 010	986	15	3	2	4	5	4
Mississippi	26	369	344	352	396	382	21	12	9	9	13	13
Missouri	80	689	636	628	722	768	13	5	5	6	5	5
Montana	10	119	101	152	111	113	13	20	23	11	27	24
Nebraska	25	262	221	245	239	344	10	9	9	9	11	7
Nevada	17	219	174	181	253	267	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
New Hampshire	16	215	169	200	233	255	4	1	2	1	1	1
New Jersey	138	2 015	1 971	1 983	2 062	2 044	6	1	1	1	1	1
New Mexico	16	263	219	239	277	315	22	12	14	13	11	10
New York	307	5 141	5 309	4 775	5 179	5 303	6	3	3	3	3	3
North Carolina	114	1 734	2 021	1 659	1 714	1 541	10	4	3	4	4	4
North Dakota	14	156	108	138	173	206	15	11	16	12	10	8
Ohio	178	3 740	3 756	3 124	3 737	4 342	7	2	2	2	2	2
Oklahoma	34	592	743	489	637	497	13	3	2	4	4	4
Oregon	81	599	628	529	639	601	17	8	8	9	9	8
Pennsylvania	191	4 964	5 041	4 822	4 872	5 119	10	1	1	1	1	1
Rhode Island	14	87	91	84	86	87	10	3	5	2	3	2
South Carolina	51	949	780	843	1 053	1 120	15	4	5	5	3	3
South Dakota	16	66	48	61	65	89	16	4	(Z)	4	4	3
Tennessee	98	1 664	1 373	1 421	1 922	1 939	12	3	3	3	3	4
Texas	268	3 451	3 942	3 177	3 350	3 334	7	2	3	2	3	3
Utah	37	222	223	223	221	222	25	28	28	28	29	29
Vermont	3	20	(D)	22	(D)	(D)	(Z)	(Z)	(D)	(Z)	(D)	(D)
Virginia	78	1 830	2 358	1 652	1 687	1 624	4	1	1	2	2	2
Washington	67	997	1 232	883	930	944	16	3	3	4	3	2
West Virginia	18	144	120	131	173	151	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Wisconsin	98	1 148	985	1 145	1 173	1 288	14	5	4	8	6	3
Wyoming	*9	40	37	39	46	37	61	27	30	28	24	15

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	6 611 040	3 823	5 588 639	2 262	1 022 401	5 359 826	23.3	(Z)	(Z)	1
Alabama -----	69 057	51	56 351	36	12 705	69 176	-2	6	7	(Z)
Alaska -----	(D)	8	(D)	1	(D)	12 420	(D)	(Z)	(D)	(D)
Arizona -----	63 116	32	61 044	17	2 072	32 902	91.8	2	3	(Z)
Arkansas -----	75 464	44	59 692	24	15 772	26 784	181.7	2	2	(Z)
California -----	682 294	341	651 033	52	31 261	535 202	27.5	1	1	1
Colorado -----	53 768	45	52 593	27	1 175	41 648	29.1	1	1	26
Connecticut -----	79 260	47	67 103	50	12 158	78 219	1.3	4	4	18
Delaware -----	23 149	(S)	(S)	27	11 057	21 736	6.5	(Z)	(S)	(Z)
District of Columbia -----	79 792	3	(D)	43	(D)	28 634	178.7	3	(D)	(D)
Florida -----	353 938	165	336 444	63	17 494	234 383	51.0	2	2	19
Georgia -----	166 620	105	139 281	78	27 339	164 795	1.1	2	1	9
Hawaii -----	(D)	19	(D)	3	(D)	35 094	(D)	1	(D)	(D)
Idaho -----	12 774	6	8 562	18	4 212	11 361	12.4	4	(Z)	11
Illinois -----	361 736	169	320 923	104	40 813	329 551	9.8	1	1	1
Indiana -----	154 101	94	86 591	84	67 511	133 404	15.5	3	5	1
Iowa -----	57 276	53	40 118	48	17 158	41 283	38.7	4	5	1
Kansas -----	50 447	56	39 291	37	11 156	55 722	-9.5	8	11	5
Kentucky -----	91 291	71	61 280	67	30 011	75 188	21.4	1	1	1
Louisiana -----	85 758	57	77 379	37	8 380	75 478	13.6	2	2	2
Maine -----	16 382	23	13 194	11	3 187	18 888	-13.3	8	9	(Z)
Maryland -----	131 466	91	118 983	53	12 483	122 783	7.1	5	5	2
Massachusetts -----	216 406	121	198 691	37	17 715	156 531	38.3	2	2	(Z)
Michigan -----	318 213	158	222 661	64	95 552	237 110	34.2	2	2	(Z)
Minnesota -----	148 261	79	141 424	38	6 837	111 797	32.6	3	4	2
Mississippi -----	32 594	25	16 490	41	16 104	60 298	-45.9	6	13	(Z)
Missouri -----	79 398	78	58 956	65	20 442	63 365	25.3	3	4	2
Montana -----	5 776	10	5 490	4	286	7 572	-23.7	11	11	(Z)
Nebraska -----	22 288	25	18 624	31	3 664	25 236	-11.7	5	6	5
Nevada -----	44 414	17	40 759	19	3 655	20 650	115.1	(Z)	(Z)	3
New Hampshire -----	20 762	15	15 169	26	5 593	16 353	27.0	1	1	3
New Jersey -----	311 398	137	256 773	91	54 625	258 480	20.5	2	1	8
New Mexico -----	10 341	16	8 642	11	1 698	9 232	12.0	10	12	(Z)
New York -----	663 373	306	605 548	101	57 825	655 790	1.2	1	1	2
North Carolina -----	162 503	111	138 752	82	23 751	116 573	39.4	3	2	15
North Dakota -----	10 519	14	7 040	14	3 478	11 601	-9.3	20	30	(Z)
Ohio -----	358 389	168	295 019	110	63 369	227 055	57.8	2	2	1
Oklahoma -----	51 309	33	43 248	33	8 061	26 698	92.2	2	2	1
Oregon -----	58 302	80	43 850	24	14 452	59 715	-2.4	5	6	2
Pennsylvania -----	395 288	186	341 957	118	53 331	261 436	51.2	1	2	1
Rhode Island -----	13 282	12	6 328	25	6 954	15 364	-13.6	1	2	1
South Carolina -----	56 878	51	45 333	46	11 545	52 036	9.3	2	3	(Z)
South Dakota -----	10 660	16	4 724	19	5 936	3 643	192.6	10	2	17
Tennessee -----	107 261	98	95 951	65	11 309	114 023	-5.9	7	7	1
Texas -----	319 371	268	306 111	57	13 260	282 277	13.1	3	3	4
Utah -----	25 291	37	23 773	12	1 518	12 899	96.1	25	26	(Z)
Vermont -----	4 134	3	(D)	7	(D)	7 152	-42.2	(Z)	(D)	(D)
Virginia -----	194 080	77	155 491	97	38 589	111 994	73.3	2	2	4
Washington -----	115 391	67	97 157	44	18 234	66 310	74.0	2	3	1
West Virginia -----	51 051	17	10 206	36	40 845	33 389	52.9	(Z)	(Z)	(Z)
Wisconsin -----	117 595	98	99 810	53	17 785	187 713	-37.4	4	4	2
Wyoming -----	5 616	*9	2 316	13	3 300	2 858	96.5	22	23	33

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	6 750 132	5 502 934	(Z)	1
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS				
General building contractor	49 724	91 847	1	3
SPECIAL TRADE CONTRACTORS				
Elevator installation and service contractor.....	3 367 482	2 853 841	(Z)	(Z)
Escalator installation and service contractor.....	261 785	152 002	(Z)	1
Foundation contractor, digging of	50 418	22 375	1	3
Millwright	2 475 524	1 886 823	1	2
Special cases	111 997	(NA)	8	(NA)
Structural steel erection contractor	61 880	66 530	1	2
Other construction activities	230 265	243 821	2	(NA)
OTHER BUSINESS ACTIVITIES				
Manufacturing	41 433	16 385	12	9
Other business activities	96 378	119 977	3	(NA)
Kind of business activity, n.s.k.	3 247	49 333	(Z)	3

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	21.3	16.5	2
Number of construction workers	16.6	13.3	2
Number of all other employees	4.7	3.2	2
Payroll, all employees \$1,000 ..	597.6	491.9	2
Payroll, construction workers do ..	447.9	383.2	2
Payroll, other employees do ..	149.7	108.6	2
Dollar value of business done do ..	1 735.6	1 457.0	2
Value of construction work do ..	1 699.9	1 419.1	2
Cost of materials, components, supplies, and fuels	456.9	378.6	2
Construction work subcontracted to others	123.1	92.7	2
Rental cost for machinery, equipment, and buildings	29.9	20.3	2
Capital expenditures, other than land	18.4	13.0	3
Gross book value of depreciable assets	185.4	113.1	2
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	28.1	29.9	(Z)
Dollar value of business done do ..	81.7	88.5	(Z)
Value added†† do ..	54.4	59.9	(Z)
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	27.1	28.8	(Z)
Value of construction work do ..	102.7	106.7	(Z)
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	31.9	34.5	(Z)
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees .....	.352	.347	(Z)
Cost of materials, components, supplies, and fuels .....	.269	.267	(Z)
Cost of construction work subcontracted out to others .....	.072	.065	1
Value of construction work subcontracted in from others .....	.273	.278	1
Rental cost for machinery, equipment, and buildings .....	.018	.014	1

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	21.3	28.1	102.7	.352	.269	.072	.273	.018
Alabama -----	22.5	22.6	65.1	.419	(D)	.037	.217	.022
Alaska -----	9.4	22.7	83.4	.372	(D)	(D)	.418	.014
Arizona -----	13.9	29.3	195.1	.213	(D)	(D)	.119	.007
Arkansas -----	20.9	26.5	85.7	.362	(D)	.069	.136	.023
California -----	23.0	31.8	109.1	.372	.266	.046	.305	.026
Colorado -----	17.3	29.7	91.6	.415	.316	.011	.373	.019
Connecticut -----	21.2	26.3	93.1	.365	.175	.030	.356	.018
Delaware -----	11.1	30.0	(S)	(S)	(S)	(S)	(S)	(S)
District of Columbia -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	27.3	25.3	97.5	.331	.226	(D)	.216	.011
Georgia -----	20.5	22.7	91.6	.327	.345	.044	.290	.014
Hawaii -----	48.5	21.8	92.4	.299	.283	.009	.331	.011
Idaho -----	19.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois -----	26.0	33.8	119.0	.370	.297	.058	.255	.017
Indiana -----	13.9	30.9	99.6	.396	.214	.088	.179	.020
Iowa -----	12.4	24.8	98.0	.324	.221	.087	.150	.014
Kansas -----	17.6	28.2	87.2	.400	.224	(D)	.051	.015
Kentucky -----	21.4	26.1	100.9	.335	.317	.076	.328	.021
Louisiana -----	21.8	27.1	94.9	.392	.308	.077	.193	.020
Maine -----	17.8	15.1	42.4	.444	(D)	.030	.165	.012
Maryland -----	22.9	33.3	126.6	.331	.284	.046	.420	.010
Massachusetts -----	23.0	27.6	103.3	.344	.244	.030	.280	.016
Michigan -----	25.2	20.5	76.8	.331	.252	.104	.249	.020
Minnesota -----	20.0	31.5	125.7	.327	.247	.046	.304	.016
Mississippi -----	17.3	24.1	69.2	.418	(D)	.015	.196	.015
Missouri -----	11.5	32.1	107.2	.397	(D)	.047	.268	.020
Montana -----	14.5	19.8	58.8	.391	.193	.008	*.469	.010
Nebraska -----	16.5	20.7	86.3	.376	.268	.016	.504	.012
Nevada -----	16.8	32.7	187.0	.228	.398	.005	.291	.015
New Hampshire -----	17.3	24.9	107.8	.303	.272	.042	.520	.011
New Jersey -----	20.4	36.1	161.2	.313	.348	.089	.200	.015
New Mexico -----	19.6	16.5	53.6	.368	.320	(D)	.537	.013
New York -----	22.2	36.7	122.5	.398	.239	.037	.262	.016
North Carolina -----	19.6	23.0	91.1	.325	.307	.053	.299	.014
North Dakota -----	13.7	11.3	49.1	.291	.319	.069	.208	.008
Ohio -----	26.1	26.2	87.3	.373	.249	.049	.264	.017
Oklahoma -----	20.7	19.4	76.0	.304	.321	(D)	.209	.011
Oregon -----	9.5	26.6	84.2	.405	.210	.050	.188	.027
Pennsylvania -----	32.2	30.1	110.6	.339	.184	.141	.256	.021
Rhode Island -----	8.6	34.0	104.4	.449	.133	.009	.158	.007
South Carolina -----	23.7	21.3	61.1	.444	(D)	.039	.243	.016
South Dakota -----	6.1	20.5	82.1	.366	.312	.050	.590	.015
Tennessee -----	21.8	23.1	92.2	.321	.321	.110	.180	.019
Texas -----	16.7	23.8	90.6	.340	.343	.034	.242	.016
Utah -----	7.9	22.5	118.1	.247	.419	.009	*.591	.029
Vermont -----	9.0	37.1	(D)	(D)	(D)	(D)	(D)	(D)
Virginia -----	29.9	26.0	101.3	.325	.276	.053	.443	.024
Washington -----	19.1	28.2	120.3	.303	.227	.055	.409	.017
West Virginia -----	9.4	25.5	89.9	.332	.449	.007	.187	.009
Wisconsin -----	15.6	26.2	95.1	.366	.275	.033	.409	.015
Wyoming -----	(D)	(D)	97.9	(D)	.350	—	(D)	(D)

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

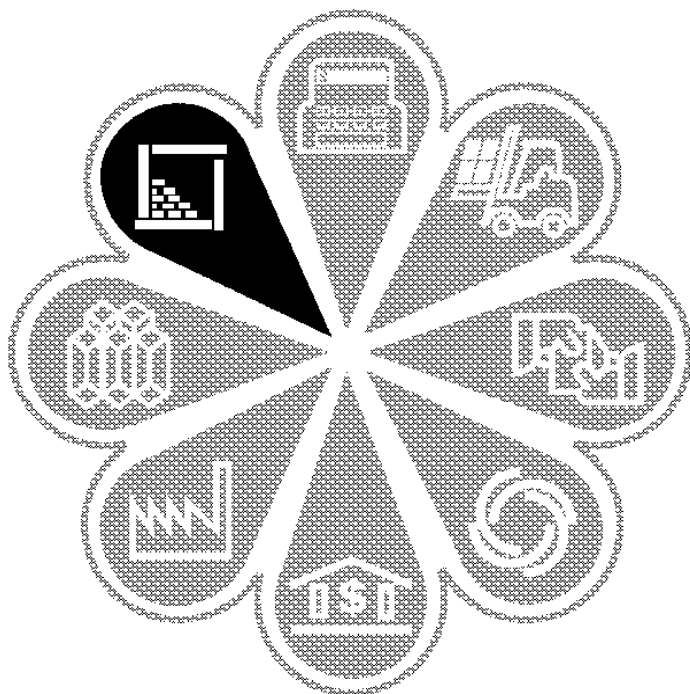
Census of Construction Industries

CC92-I-26

INDUSTRY SERIES

Special Trade Contractors, Not Elsewhere Classified

Industry 1799



1992

Census of

Construction Industries

CC92-I-26

INDUSTRY SERIES

Special Trade Contractors, Not Elsewhere Classified

Industry 1799

Issued October 1995



U.S. Department of Commerce

Ronald H. Brown, Secretary

David J. Barram, Deputy Secretary

Economics and Statistics Administration

**Everett M. Ehrlich, Under Secretary
for Economic Affairs**

BUREAU OF THE CENSUS

Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records, however, resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . .	3					
Depreciation charges during year— buildings, machinery, and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New buildings—machinery and equipment	3					
Used buildings—machinery and equipment	3					
Communication services, costs for	2					
Employees:						
All employees—average number	1, 2, 8	1	5	6		8
Construction workers—average number	1, 2, 9	1, 9				
Construction workers—quarterly	2, 9	9				
Other employees—average number	2					
Other employees—quarterly	2					
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for . .	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll:						
First-quarter, all employees	2					
Annual:						
All employees	1, 2, 8	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value:						
Dollar value of business done, total	2, 11		5	6	11	
Value of construction work, total	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others	1, 2					
Other business receipts	2					
Net value of construction work	1, 2, 8	1	5	6		8
Value added	1, 2, 8	1	5	6		8
Rental costs:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For buildings	2					
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

Note: Data for 1987 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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**Statistics for Establishments Without Payroll appear in the U.S. Industry
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Summary of Findings

Establishments classified in this industry are primarily engaged in construction work that could not be classified in another specific industry. This industry includes establishments engaged in construction of swimming pools and fences, erection and installation of ornamental metal work, house moving, shoring work, waterproofing, dampproofing, fireproofing, sandblasting and steam cleaning of building exteriors; asbestos and lead paint removal; and modular furniture attachment. For additional examples, refer to the *Standard Industrial Classification Manual: 1987* (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$14.2 billion in total dollar value of business. Of this amount, \$13.7 billion were for the value of construction work. These establishments paid out \$4.2 billion for materials, components, and supplies and \$1.3 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$305 million. Value added for 1992 was \$8.3 billion.

There were 25,270 establishments with total employment averaging 204,333 during the year. Total payroll for 1992 was \$4.4 billion.

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Larger establishments with 20 employees or more, while representing only 8 percent of the total number of employer establishments in this industry, accounted for 51 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

Figure 1. **Value of Construction Work by Type of Construction**

(Percent)

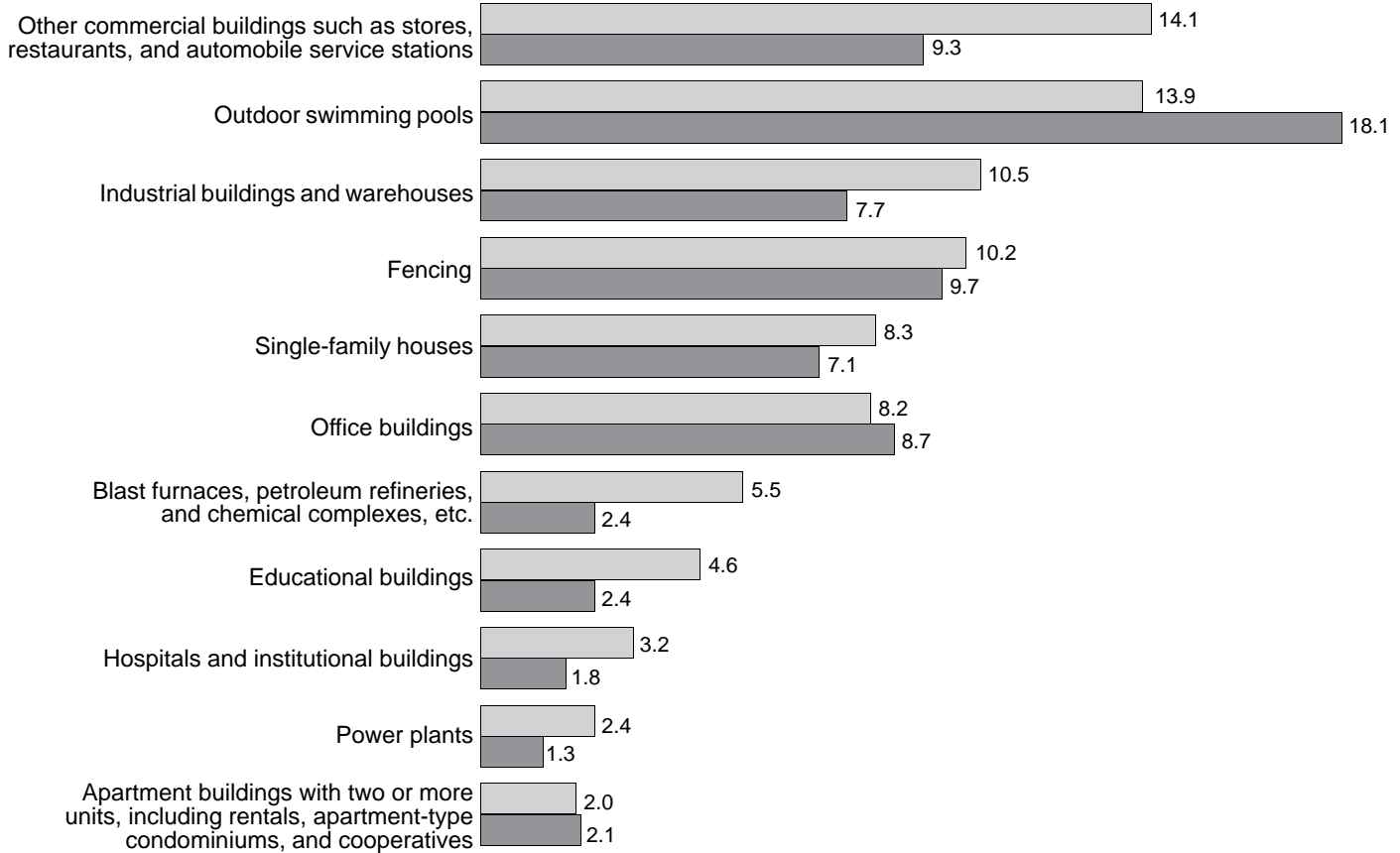
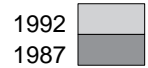


Figure 2. **Selected Costs per Dollar Value of Business Done**

(Percent)

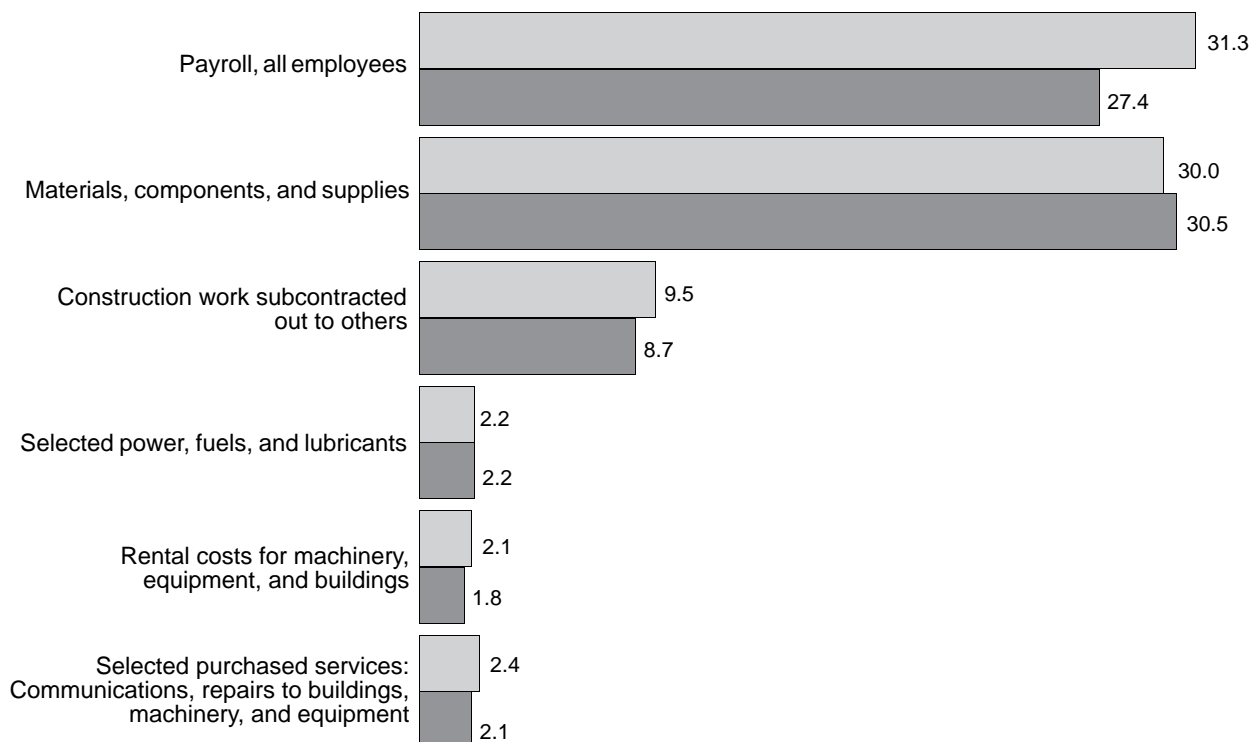
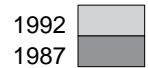


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
A	B	C	D	E	F	G	H	I	
United States -----	25 270	204 333	157 231	4 435 282	3 119 913	13 667 090	12 325 277	8 270 475	4 550 035
Alabama -----	392	3 053	2 491	55 048	40 790	151 550	140 928	94 561	51 619
Alaska -----	49	(D)	(D)	36 449	28 794	69 264	65 873	63 861	(D)
Arizona -----	524	4 923	3 694	88 711	59 305	319 238	253 729	188 067	90 885
Arkansas -----	198	1 423	1 096	22 467	16 335	65 036	60 923	35 276	29 432
California -----	3 141	26 621	20 354	637 627	449 663	1 986 000	1 750 419	1 169 449	621 747
Colorado -----	372	2 812	2 168	57 756	39 813	180 084	171 105	111 621	62 444
Connecticut -----	433	3 179	2 381	89 065	61 077	278 001	249 091	177 606	82 329
Delaware -----	51	592	482	12 197	9 301	32 039	29 933	22 109	9 810
District of Columbia -----	3	(D)	(D)	(D)	106	(D)	(D)	(D)	(D)
Florida -----	2 124	13 579	10 100	254 294	167 093	935 920	801 969	486 853	332 803
Georgia -----	631	4 724	3 584	99 392	67 295	288 020	263 450	179 826	90 650
Hawaii -----	95	(D)	(D)	(D)	18 325	(D)	79 866	54 934	(D)
Idaho -----	127	(D)	(D)	(D)	8 654	41 954	39 193	24 556	14 710
Illinois -----	874	9 263	7 183	243 996	171 133	740 734	661 767	459 605	210 713
Indiana -----	435	4 432	3 483	93 440	68 979	263 344	246 757	171 092	82 228
Iowa -----	157	1 270	940	22 387	13 776	64 589	60 378	45 662	19 303
Kansas -----	270	1 339	1 060	28 773	20 990	76 837	70 552	47 517	25 819
Kentucky -----	303	1 497	1 141	26 890	19 368	98 740	92 581	60 933	36 548
Louisiana -----	471	6 641	5 610	138 101	112 051	348 616	327 768	231 137	110 759
Maine -----	116	746	(D)	(D)	10 100	38 567	(D)	(D)	17 976
Maryland -----	502	4 940	3 671	106 447	70 199	290 001	263 879	173 471	98 652
Massachusetts -----	581	4 615	3 495	111 822	75 553	334 452	308 888	204 240	115 827
Michigan -----	783	5 660	4 179	125 960	89 535	404 196	353 618	232 986	132 270
Minnesota -----	374	2 949	2 327	71 239	51 085	202 430	186 164	140 838	(D)
Mississippi -----	200	1 037	786	(D)	11 404	53 755	50 979	32 654	21 390
Missouri -----	496	4 174	3 069	87 148	62 666	254 208	234 257	177 398	86 287
Montana -----	112	(D)	(D)	9 831	5 960	35 508	34 249	24 614	17 522
Nebraska -----	119	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nevada -----	205	(D)	(D)	(D)	(D)	119 134	(D)	59 001	(D)
New Hampshire -----	101	687	480	(D)	9 864	50 063	47 144	31 776	16 215
New Jersey -----	963	7 546	5 768	185 899	122 186	570 594	518 179	345 771	189 105
New Mexico -----	136	(D)	(D)	18 779	13 234	74 767	71 457	45 519	28 010
New York -----	1 622	13 677	10 100	318 176	209 952	1 034 251	924 301	582 626	359 616
North Carolina -----	618	4 452	3 508	82 005	58 362	243 096	226 283	145 561	(D)
North Dakota -----	79	606	480	12 677	9 327	34 523	(D)	24 617	(D)
Ohio -----	942	7 859	5 869	175 957	124 912	514 109	483 618	319 120	190 089
Oklahoma -----	290	2 514	2 007	45 106	32 417	130 774	122 058	83 774	43 293
Oregon -----	428	1 940	1 558	36 299	28 819	116 711	(D)	(D)	36 758
Pennsylvania -----	1 097	8 891	6 912	190 196	131 026	577 433	530 508	375 382	191 774
Rhode Island -----	135	555	436	12 746	9 151	46 248	43 588	27 110	16 981
South Carolina -----	389	2 491	1 931	42 428	29 861	144 868	133 205	86 304	51 455
South Dakota -----	43	(D)	379	7 960	5 773	33 602	32 336	21 429	11 587
Tennessee -----	449	2 847	2 133	51 364	34 974	172 064	151 801	101 643	56 749
Texas -----	1 815	19 795	16 069	407 019	310 425	1 219 324	1 097 515	724 109	432 576
Utah -----	166	(D)	(D)	(D)	(D)	(D)	80 413	54 499	(D)
Vermont -----	46	(D)	217	(D)	3 999	20 174	(D)	13 518	(D)
Virginia -----	614	4 840	3 791	91 172	61 613	287 527	260 071	173 240	96 636
Washington -----	609	4 091	3 175	97 907	72 557	288 226	265 927	181 037	90 428
West Virginia -----	108	(D)	(D)	16 760	13 079	41 940	39 658	30 362	10 284
Wisconsin -----	382	2 495	1 881	54 138	37 319	164 504	155 157	100 511	60 957
Wyoming -----	97	610	528	7 671	5 984	23 195	20 245	14 177	9 288

1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q	B	G	M	
1 341 813	5 148 359	298 476	301 201	2 151 822	176 084	10 814 313	6 622 229	1	1	5	U.S.
10 622	45 752	(D)	*3 313	22 682	2 527	118 173	77 387	7	7	58	AL
3 391	25 757	(D)	4 805	(D)	545	39 237	33 716	(D)	3	2	AK
65 509	145 407	6 665	7 653	42 269	4 470	255 929	156 018	9	7	20	AZ
4 114	15 370	(D)	1 059	9 067	852	41 703	24 691	10	10	34	AR
235 581	928 091	49 967	32 093	297 140	24 683	1 733 578	1 068 146	2	2	8	CA
8 979	107 663	6 423	9 645	48 791	2 628	150 079	90 153	8	7	20	CO
28 909	95 885	6 955	4 203	61 381	2 384	162 704	103 898	5	4	22	CT
2 107	8 182	1 239	*409	(D)	349	20 388	13 413	9	9	65	DE
(D)	(D)	(D)	—	(D)	110	*14 245	*8 669	(D)	(D)	—	DC
133 951	338 240	19 425	22 455	135 917	12 289	775 563	426 271	4	3	14	FL
24 570	132 131	6 190	7 686	56 723	6 197	302 106	174 610	5	5	16	GA
(D)	42 405	2 562	(S)	13 992	639	43 621	29 302	(D)	8	(S)	HI
*2 760	(D)	360	538	3 557	(S)	(S)	(S)	(D)	22	32	ID
78 967	217 586	13 408	14 616	108 141	6 536	443 312	295 541	7	4	6	IL
16 587	94 105	5 197	9 399	42 213	2 860	161 240	100 864	5	5	26	IN
4 211	23 852	933	1 802	(S)	748	39 570	26 120	10	9	22	IA
6 286	24 041	1 347	1 511	7 589	1 270	51 521	32 822	9	9	22	KS
6 159	(D)	(D)	*3 652	34 022	1 342	65 373	41 137	10	11	53	KY
20 848	98 886	8 020	6 147	44 924	3 746	177 084	119 860	4	4	11	LA
(D)	6 651	638	*436	7 812	637	40 391	26 592	15	(D)	45	ME
26 122	108 750	6 225	3 369	27 249	4 721	297 390	187 842	5	5	22	MD
25 564	142 139	7 620	9 719	62 474	5 385	378 371	238 724	5	4	11	MA
50 577	163 530	7 534	8 621	55 625	6 168	361 966	223 339	4	4	12	MI
16 266	80 310	5 019	7 178	27 779	2 416	146 875	102 366	6	7	14	MN
2 776	11 455	(D)	*1 729	(D)	663	40 077	26 048	14	12	49	MS
19 951	66 527	4 112	3 137	28 019	3 385	207 505	130 050	5	4	23	MO
1 259	(D)	(D)	666	(D)	474	21 430	14 598	(D)	16	35	MT
(D)	(D)	(D)	869	(D)	666	27 117	18 279	(D)	(D)	37	NE
(D)	51 628	(D)	*2 017	718	1 213	75 123	43 702	(D)	(D)	54	NV
2 919	(D)	780	474	4 718	918	59 667	35 242	12	15	21	NH
52 414	186 953	14 299	9 006	90 711	8 298	561 759	347 105	4	4	17	NJ
3 310	37 903	(D)	2 441	(D)	941	37 849	23 986	(D)	15	34	NM
109 950	311 826	18 251	14 155	150 347	14 166	960 322	581 588	3	3	16	NY
16 813	91 540	5 027	5 703	(D)	4 025	220 988	128 173	5	5	16	NC
(D)	24 805	(D)	1 128	10 870	250	13 371	5 336	13	(D)	37	ND
30 490	179 211	11 912	10 148	87 562	6 149	365 242	225 878	4	3	14	OH
8 715	54 770	2 932	3 151	20 725	1 696	99 724	58 742	8	8	22	OK
(D)	45 761	2 945	*2 811	16 509	1 270	79 769	49 720	9	(D)	47	OR
46 926	231 018	13 662	18 247	103 427	6 951	508 237	299 360	3	3	12	PA
2 660	16 055	685	391	6 075	827	57 342	33 461	14	13	24	RI
11 663	35 880	3 160	2 976	(D)	2 439	123 568	72 845	7	11	31	SC
(S)	(D)	(D)	75	(D)	297	16 554	9 245	(D)	15	(Z)	SD
20 264	51 464	2 498	2 054	25 896	2 976	150 623	84 831	8	9	23	TN
121 809	463 831	26 064	37 056	194 837	12 895	709 892	424 871	3	3	32	TX
(D)	58 230	(D)	2 939	(D)	1 006	53 546	35 389	(D)	11	32	UT
(D)	*8 790	(D)	*102	*1 089	333	21 464	12 552	(D)	(D)	46	VT
27 456	113 047	6 166	4 912	45 598	5 149	257 699	154 486	6	6	23	VA
22 299	123 950	6 130	6 280	33 482	2 341	135 274	88 358	4	4	22	WA
2 283	4 036	(D)	*1 275	*6 250	453	18 479	10 869	(D)	12	61	WV
9 347	66 013	3 228	3 173	29 228	2 128	143 184	88 473	8	7	18	WI
2 950	7 369	1 217	850	6 938	359	13 422	8 403	11	18	26	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year	25 270	23 198	20 446	20 626	1	1	1	2
Proprietors and working partners	7 219	4 343	5 536	11 192	2	4	3	3
All employees**	204 333	176 084	127 727	128 440	1	1	1	1
Construction workers:								
March	139 491	125 584	91 693	93 499	1	1	1	1
May	164 167	147 327	107 455	115 011	1	1	1	1
August	171 685	155 062	106 087	118 204	1	1	1	1
November	153 583	138 655	95 737	103 153	1	1	1	1
Average	157 231	141 615	102 099	107 632	1	1	1	1
Other employees:								
March	46 200	32 354	25 458	19 445	1	1	1	1
May	48 782	35 096	(NA)	(NA)	1	1	(NA)	(NA)
August	48 113	37 017	(NA)	(NA)	1	1	(NA)	(NA)
November	45 312	33 285	(NA)	(NA)	1	1	(NA)	(NA)
Average	47 102	34 469	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	4 435 282	3 089 338	1 833 071	1 383 720	1	1	1	1
Payroll, construction workers	3 119 913	2 268 750	1 331 302	1 085 630	1	1	1	1
Payroll, other employees	1 315 368	820 588	501 769	298 090	1	1	1	1
First-quarter payroll, all employees	1 000 884	645 275	410 028	282 804	1	1	1	1
Fringe benefits, all employees	1 001 671	628 063	344 613	263 594	1	1	1	1
Legally required expenditures	724 470	470 126	259 098	162 846	1	1	1	1
Voluntary expenditures	277 202	157 937	85 514	100 748	2	1	1	1
Dollar value of business done	14 162 323	11 294 202	6 365 681	4 607 808	1	1	1	1
Value of construction work	13 667 090	10 814 313	6 076 411	4 407 208	1	1	1	1
Value of construction work subcontracted in from others	5 148 359	3 523 255	1 975 290	1 564 606	2	2	1	1
Other business receipts	495 233	479 889	289 270	200 600	2	3	2	2
Net value of construction work†	12 325 277	9 832 759	5 620 493	4 128 771	1	1	1	1
Value added††	8 270 475	6 622 229	3 694 404	2 692 686	1	1	1	1
Selected costs	5 891 847	4 671 973	2 671 277	1 915 122	1	1	1	1
Materials, components, and supplies	4 245 382	3 439 643	2 042 258	1 530 449	1	1	1	1
Construction work subcontracted out to others	1 341 813	981 554	455 918	278 437	3	2	2	2
Selected power, fuels, and lubricants	304 653	250 775	173 100	106 236	1	1	1	1
Electricity	47 887	33 931	23 221	13 107	2	2	2	1
Natural and manufactured gas	10 206	6 745	6 353	6 130	3	3	4	3
Gasoline and diesel fuel	231 161	196 900	133 904	76 402	1	1	1	1
On highway use	200 444	174 695	(NA)	(NA)	1	1	(NA)	(NA)
Off highway use	30 716	22 205	(NA)	(NA)	2	3	(NA)	(NA)
Other, including lubricating oils and greases	15 399	13 198	9 620	10 600	3	2	3	2
Rental cost for machinery, equipment, and buildings	298 476	198 704	100 120	65 508	2	2	2	1
For machinery and equipment	156 602	107 784	54 768	45 111	3	2	2	1
For buildings	141 874	90 920	45 351	20 397	2	2	2	2
Selected purchased services	339 332	238 813	145 634	103 637	2	2	1	1
Communication services	130 207	93 178	57 027	36 157	2	2	2	1
Repairs to buildings and other structures	19 170	14 528	9 761	5 335	4	3	3	2
Repairs to machinery and equipment	189 955	131 106	78 845	62 145	2	2	2	2
Ownership of construction projects:								
Value of construction work	13 667 090	10 814 313	6 076 411	4 407 208	1	1	1	1
Government owned	2 696 208	1 378 600	498 410	545 730	2	3	6	1
Federal	813 410	469 275	(NA)	(NA)	4	5	(NA)	(NA)
State and local	1 882 799	909 324	(NA)	(NA)	3	3	(NA)	(NA)
Privately owned	10 970 881	9 435 713	5 578 000	3 861 478	2	1	1	1

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 949 581	1 229 588	2	2
Capital expenditures, other than land -----	301 201	206 173	5	3
New -----	235 911	165 428	6	3
Used -----	65 290	40 744	7	5
Retirements and disposition of depreciable assets -----	98 960	58 916	6	9
End-of-year gross book value of depreciable assets -----	2 151 822	1 376 845	2	2
Depreciation charges during year -----	246 741	180 421	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	325 901	260 303	6	5
Capital expenditures, other than land -----	45 070	27 754	10	11
New buildings and other structures -----	32 160	21 313	10	13
Used buildings and other structures -----	12 910	6 440	20	15
Retirements and disposition of depreciable assets -----	6 405	11 072	15	32
End-of-year gross book value of depreciable assets -----	364 565	276 985	5	4
Depreciation charges during year -----	26 676	21 461	7	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 623 680	969 285	2	2
Capital expenditures, other than land -----	256 132	178 419	5	3
New machinery and equipment, including automobiles and trucks -----	203 752	144 115	6	3
New automobiles and trucks, intended primarily for highway use -----	80 270	79 575	6	4
Used machinery and equipment, including automobiles and trucks -----	52 380	34 304	6	5
Retirements and disposition of depreciable assets -----	92 555	47 844	6	7
End-of-year gross book value of depreciable assets -----	1 787 257	1 099 860	2	2
Depreciation charges during year -----	220 065	158 960	2	2

Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	25 270	1
Value of construction work	13 667 090	1
Establishments with inventories:		
Number	9 437	1
Value of construction work	7 235 698	1
Inventories ¹ :		
End of 1992, materials and supplies	306 358	3
End of 1991, materials and supplies	296 090	3
Establishments with no inventories:		
Number	6 039	2
Value of construction work	3 066 178	2
Establishments not reporting:		
Number	9 794	1
Value of construction work	3 365 213	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1992											
Number of establishments -----	25 270	(S)	4 945	3 095	1 567	337	134	37	5	—	
All employees** -----	204 333	(S)	31 689	40 535	45 544	23 158	19 616	11 835	3 187	—	
Payroll, all employees -----	4 435 282	437 340	602 922	891 436	1 075 844	573 234	460 879	322 109	71 518	—	
Dollar value of business done -----	14 162 323	1 802 018	2 178 838	2 983 430	3 223 114	1 608 807	1 329 869	870 384	165 862	—	
Value of construction work -----	13 667 090	1 771 333	2 117 923	2 891 046	3 102 822	1 570 012	1 261 606	801 143	151 205	—	
Net value of construction work† -----	12 325 277	1 568 365	1 908 088	2 610 229	2 796 631	1 406 739	1 139 034	896 192	(D)	—	
Value added†† -----	8 270 475	957 143	1 172 564	1 714 591	1 878 437	1 005 303	827 866	611 888	102 683	—	
Cost of materials, components, supplies, and fuels -----	4 550 035	641 906	796 439	988 022	1 038 487	440 231	379 431	265 519	(D)	—	
Cost of construction work subcontracted out to others -----	1 341 813	202 968	209 835	280 817	306 191	163 273	122 572	56 157	(D)	—	
Rental cost for machinery, equipment, and buildings ---	298 476	37 422	48 618	69 677	73 809	29 115	20 156	14 275	5 404	—	
Capital expenditures, other than land -----	301 201	47 665	40 177	87 327	56 048	21 096	19 614	21 810	7 465	—	
End-of-year gross book value of depreciable assets ---	2 151 822	290 512	348 860	546 463	498 562	192 164	137 172	106 774	31 315	—	
1987											
All employees** -----	176 084	(S)	(S)	40 461	38 077	15 477	13 548	6 726	(D)	(D)	
Value of construction work -----	10 814 313	(S)	(S)	2 539 287	2 503 691	1 006 529	823 849	355 155	(D)	(D)	
Value added†† -----	6 622 229	(S)	(S)	1 520 099	1 585 979	655 746	503 767	232 641	(D)	(D)	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	3	3	2	2	2	5	(Z)	—	
Net value of construction work† -----	1	3	3	2	1	2	1	3	(D)	—	
Capital expenditures, other than land -----	5	9	9	14	4	(Z)	3	(Z)	(Z)	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1992											
Number of establishments -----	25 270	(S)	(S)	3 163	5 664	3 859	3 220	2 151	641	239	104
All employees** -----	204 333	(S)	(S)	6 153	19 747	23 845	33 694	44 332	26 522	19 181	22 172
Payroll, all employees -----	4 435 282	(S)	(S)	74 070	281 674	419 495	668 554	1 036 024	667 205	524 249	672 607
Dollar value of business done -----	14 162 323	(S)	(S)	226 998	916 224	1 367 352	2 264 706	3 280 584	2 201 871	1 625 412	2 104 447
Value of construction work -----	13 667 090	(S)	(S)	223 224	903 648	1 336 206	2 200 213	3 169 217	2 129 900	1 586 639	1 948 313
Net value of construction work† -----	12 325 277	(S)	(S)	210 654	851 105	1 239 923	2 009 496	2 881 617	1 850 969	1 405 197	1 716 538
Value added†† -----	8 270 475	(S)	(S)	135 453	532 325	794 166	1 279 400	1 901 283	1 250 597	970 425	1 301 859
Cost of materials, components, supplies, and fuels -----	4 550 035	(S)	(S)	78 976	331 357	476 903	794 589	1 091 701	672 343	473 545	570 813
Cost of construction work subcontracted out to others -----	1 341 813	(S)	(S)	12 570	52 542	96 283	190 716	287 600	278 931	181 442	231 776
Rental cost for machinery, equipment, and buildings -----	298 476	(S)	(S)	4 410	20 279	32 536	52 418	75 850	48 288	30 518	32 135
Capital expenditures, other than land -----	301 201	(S)	(S)	7 691	27 734	34 045	50 193	81 958	32 395	19 709	42 819
End-of-year gross book value of depreciable assets -----	2 151 822	(S)	(S)	42 333	147 458	245 001	376 650	578 288	307 477	177 899	249 157
1987											
All employees** -----	176 084	(S)	(S)	(S)	(S)	26 657	30 563	39 345	19 738	12 593	11 357
Value of construction work -----	10 814 313	(S)	(S)	(S)	(S)	1 431 604	1 848 398	2 804 671	1 532 015	935 443	952 319
Value added†† -----	6 622 229	(S)	(S)	(S)	(S)	875 351	1 133 142	1 703 676	939 112	593 757	571 007
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	5	4	4	3	2	2	1	3
Net value of construction work† -----	1	(S)	(S)	4	3	3	3	2	2	1	1
Capital expenditures, other than land -----	5	(S)	(S)	14	13	12	8	14	2	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair				
	A	B	C	D	A	B	C	D
1992								
Value of construction work	13 667 090	5 990 142	3 601 901	3 409 043	1	1	1	1
Building construction	7 352 167	2 590 776	2 766 640	1 994 751	1	2	1	2
Single-family houses	1 129 328	539 908	304 170	285 250	3	5	5	5
Single-family houses, detached	985 919	474 926	274 053	236 940	3	4	5	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	143 408	64 981	30 117	48 310	10	16	16	17
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	278 469	65 470	121 825	91 174	5	8	8	6
Other residential buildings, including hotels, motels, and tourist cabins	106 659	41 645	35 943	29 071	6	13	6	7
Office buildings	1 117 849	374 353	498 000	245 497	2	3	2	3
Other commercial buildings such as stores, restaurants, and automobile service stations	1 925 065	728 339	732 086	464 640	2	3	2	4
Industrial buildings and warehouses	1 429 679	386 789	484 862	558 028	2	3	2	3
Industrial buildings	1 286 430	329 420	439 688	517 321	2	3	2	3
Warehouses	143 249	57 369	45 173	40 707	4	7	5	7
Religious buildings	90 525	30 792	33 229	26 504	4	8	4	6
Educational buildings	625 069	162 194	283 370	179 505	3	7	4	6
Hospitals and institutional buildings	437 851	149 345	208 592	79 914	2	2	4	4
Amusement, social, and recreational buildings, indoors	80 949	30 689	33 771	16 489	7	10	8	17
Other nonresidential buildings	130 723	81 251	30 793	18 679	6	8	11	13
Nonbuilding construction	5 648 920	3 399 366	835 262	1 414 292	2	2	2	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	255 970	118 180	57 396	80 394	6	6	11	13
Outdoor swimming pools	1 898 869	1 454 781	214 549	229 539	4	4	5	6
Private driveways and parking areas	95 254	41 653	8 833	44 769	17	22	22	30
Fencing	1 400 817	1 031 399	197 590	171 828	4	4	6	5
Recreational facilities	68 624	56 149	8 889	7 856	7	6	19	33
Conservation and development construction	186 146	166 144	8 189	11 814	6	6	19	17
Power and communication transmission lines, towers, and related facilities	73 180	50 670	10 316	12 195	7	5	13	16
Sewers, water mains, and related facilities	114 721	47 953	33 821	32 946	7	10	14	8
Blast furnaces, petroleum refineries, chemical complexes, etc.	755 346	177 388	136 016	441 942	2	3	2	2
Power plants	324 966	48 667	97 952	178 347	3	4	2	4
Power plants, nuclear	69 810	4 790	18 002	47 018	2	4	2	2
Power plants and cogeneration plants, except nuclear	255 156	43 877	79 950	131 330	3	5	3	5
Water storage facilities	69 332	29 533	16 172	23 627	13	16	16	23
Oilfields	111 900	28 747	6 429	76 724	4	9	5	4
Other nonbuilding construction	293 793	148 102	39 110	106 581	4	3	8	7
Construction work, n.s.k.	666 003	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
1987								
Value of construction work	10 814 313	4 961 041	1 973 820	1 875 305	1	1	2	1
Building construction	4 645 806	2 024 546	1 473 146	1 148 113	1	2	2	2
Single-family houses	767 914	357 173	230 013	180 727	4	5	6	7
Single-family houses, detached	686 523	304 273	218 288	163 961	4	5	7	7
Single-family houses, attached, including townhouses and townhouse-type condominiums	81 390	52 899	11 725	16 765	9	13	14	12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	232 012	120 129	46 739	65 144	6	10	10	6
Other residential buildings, including hotels, motels, and tourist cabins	207 045	96 442	62 938	47 664	5	7	8	7
Office buildings	937 438	449 476	336 937	151 024	2	3	2	4
Other commercial buildings such as stores, restaurants, and automobile service stations	1 001 305	427 359	309 004	264 941	2	3	3	4
Industrial buildings and warehouses	834 379	355 985	219 816	258 577	2	3	3	5
Industrial buildings	718 889	286 054	194 123	238 711	2	3	3	5
Warehouses	115 490	69 931	25 693	19 866	5	6	9	9
Educational buildings	263 748	64 970	119 805	78 973	3	5	6	5
Hospitals and institutional buildings	193 862	75 721	78 254	39 886	3	6	4	6
Other nonresidential buildings	208 103	77 291	69 640	61 177	5	8	7	9
Nonbuilding construction	4 164 361	2 936 495	500 674	727 192	2	2	3	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	117 660	82 836	15 839	18 984	6	8	12	9
Outdoor swimming pools	1 959 077	1 604 611	169 266	185 199	3	3	8	6
Fencing	1 051 228	829 020	105 288	116 919	4	4	4	5
Power and communication transmission lines, towers, and related facilities	51 207	25 819	15 814	9 573	15	8	33	16
Sewers, water mains, and related facilities	69 719	45 845	9 610	14 263	10	12	11	15
Blast furnaces, petroleum refineries, chemical complexes, etc.	256 934	70 142	62 255	124 536	4	3	6	5
Power plants	136 987	36 854	32 109	68 024	3	3	5	4
Power plants, nuclear	35 406	10 936	9 635	14 834	3	(Z)	2	6
Power plants and cogeneration plants, except nuclear	101 581	25 917	22 474	53 189	4	5	7	4
Other nonbuilding construction	521 549	241 368	90 493	189 694	6	7	11	8
Construction work, n.s.k.	2 004 146	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H	B	D	H	
All establishments -----	25 270	204 333	4 435 282	13 667 090	9 838 188	12 325 277	8 270 475	1 341 813	1	1	3
Establishments not specializing by type -----	3 093	43 477	1 057 570	3 017 958	(NA)	2 770 827	1 945 568	247 131	2	2	3
Establishments specializing 51 percent or more -----	22 177	160 856	3 377 711	10 649 132	9 838 188	9 554 450	6 324 907	1 094 682	1	1	3
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	2 969	15 246	263 478	852 312	773 730	803 726	515 035	48 586	4	4	10
Establishments with —											
100 percent specialization -----	1 715	8 125	135 372	440 546	440 546	408 836	259 882	31 710	5	5	13
90 to 99 percent specialization -----	517	2 976	52 679	153 702	143 104	148 031	93 115	5 671	8	8	26
80 to 89 percent specialization -----	209	1 438	29 283	88 809	72 904	86 409	58 687	2 400	12	10	20
70 to 79 percent specialization -----	353	1 858	31 631	115 453	84 974	107 261	70 708	8 192	12	14	27
60 to 69 percent specialization -----	151	616	11 260	41 791	25 840	(D)	25 346	(D)	16	18	(D)
51 to 59 percent specialization -----	24	233	3 253	12 011	6 363	(D)	7 298	(D)	38	24	(D)
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type -----	288	1 257	20 540	86 829	74 062	76 420	49 573	*10 410	14	20	47
Establishments with —											
100 percent specialization -----	126	442	6 810	29 752	29 752	24 443	14 930	(S)	22	30	(S)
90 to 99 percent specialization -----	(S)	177	*3 981	*16 715	*15 198	*16 653	*13 311	(S)	37	43	(S)
80 to 89 percent specialization -----	*11	240	3 771	9 820	8 033	(D)	6 978	(D)	9	10	(D)
70 to 79 percent specialization -----	43	*275	*3 466	*24 989	*17 725	*22 287	*11 366	*2 702	45	51	73
60 to 69 percent specialization -----	(S)	123	2 512	5 553	3 354	(D)	2 988	(D)	25	24	(D)
51 to 59 percent specialization -----	—	—	—	—	—	—	—	—	—	—	—
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type -----	307	2 322	41 836	140 252	114 511	126 945	81 363	13 307	14	10	21
Establishments with —											
100 percent specialization -----	114	700	11 921	51 469	51 469	48 130	27 984	*3 339	18	21	44
90 to 99 percent specialization -----	*26	227	5 677	16 364	15 032	15 439	10 744	926	26	23	21
80 to 89 percent specialization -----	*32	*163	(S)	*7 090	*5 672	*4 733	*3 364	(S)	65	68	(S)
70 to 79 percent specialization -----	67	490	9 979	26 520	18 846	25 488	16 232	1 032	21	11	9
60 to 69 percent specialization -----	(S)	425	10 685	32 556	20 063	27 598	20 332	(S)	14	15	(S)
51 to 59 percent specialization -----	*13	*317	*2 010	*6 253	*3 430	*5 558	*2 706	(S)	74	62	(S)
OFFICE BUILDINGS											
All establishments specializing in type -----	691	11 407	269 839	720 576	610 231	628 158	462 219	92 417	3	3	5
Establishments with —											
100 percent specialization -----	369	5 393	114 733	290 441	290 441	264 198	187 286	26 243	4	5	16
90 to 99 percent specialization -----	92	1 503	37 208	110 644	102 865	83 693	58 829	26 952	8	5	1
80 to 89 percent specialization -----	70	695	18 751	42 827	34 893	40 225	28 295	2 602	11	9	12
70 to 79 percent specialization -----	51	1 843	48 536	138 928	98 974	117 481	92 594	21 447	3	3	1
60 to 69 percent specialization -----	92	1 536	34 584	94 822	59 483	83 701	66 265	11 121	10	8	18
51 to 59 percent specialization -----	17	437	16 027	42 914	23 576	38 861	28 950	4 053	10	7	2
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	1 900	18 971	446 362	1 522 109	1 415 014	1 333 602	822 682	188 507	3	3	3
Establishments with —											
100 percent specialization -----	1 393	12 489	306 330	1 078 545	1 078 545	931 494	564 121	147 052	3	3	3
90 to 99 percent specialization -----	95	1 405	33 634	100 150	92 685	89 241	61 177	10 908	8	6	6
80 to 89 percent specialization -----	138	1 311	31 127	118 579	96 948	102 858	53 629	15 722	14	8	11
70 to 79 percent specialization -----	135	2 009	35 866	101 515	74 489	93 345	61 884	8 170	19	12	12
60 to 69 percent specialization -----	81	1 258	28 130	83 473	51 062	79 118	55 509	4 355	10	10	12
51 to 59 percent specialization -----	57	499	11 276	39 847	21 286	37 546	26 363	2 300	20	21	26
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	917	14 881	353 804	899 699	773 769	859 301	598 285	40 398	3	3	6
Establishments with —											
100 percent specialization -----	462	6 880	161 961	429 114	429 114	416 489	283 250	12 626	4	4	9
90 to 99 percent specialization -----	(S)	780	17 900	46 059	43 877	45 061	22 198	998	13	8	2
80 to 89 percent specialization -----	93	1 716	45 696	110 908	89 645	106 281	84 990	4 627	9	10	18
70 to 79 percent specialization -----	108	2 747	75 710	174 407	127 764	159 289	115 511	15 118	4	5	10
60 to 69 percent specialization -----	97	2 304	41 392	106 134	65 408	100 881	70 102	5 252	6	6	18
51 to 59 percent specialization -----	64	454	11 145	33 077	17 960	31 300	22 235	1 777	14	11	27
EDUCATIONAL BUILDINGS											
All establishments specializing in type -----	426	4 062	81 296	259 551	195 179	233 651	168 830	25 900	7	7	7
Establishments with —											
100 percent specialization -----	114	597	11 738	41 593	41 593	38 318	25 197	3 276	23	25	35
90 to 99 percent specialization -----	44	150	3 861	*19 178	*18 302	(D)	8 743	(D)	31	51	(D)
80 to 89 percent specialization -----	68	686	9 914	30 042	24 880	28 812	20 172	1 230	19	20	27
70 to 79 percent specialization -----	124	1 043	21 573	73 371	53 577	68 074	48 578	5 297	19	12	6
60 to 69 percent specialization -----	57	1 184	23 434	68 284	42 143	61 730	47 107	6 554	8	5	2
51 to 59 percent specialization -----	19	403	10 775	27 082	14 684	(D)	19 034	(D)	8	9	(D)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992—Con.

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H	I	J	K	L
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type -----	84	1 282	30 609	82 035	61 136	78 768	53 770	3 267	9	8	9
Establishments with —											
100 percent specialization -----	*17	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
90 to 99 percent specialization -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
80 to 89 percent specialization -----	(S)	359	11 107	21 442	17 813	20 806	14 814	(S)	17	15	(S)
70 to 79 percent specialization -----	10	265	6 377	17 478	12 642	16 342	12 587	1 135	19	22	14
60 to 69 percent specialization -----	11	287	4 719	12 578	7 847	12 076	9 729	502	16	21	28
51 to 59 percent specialization -----	7	203	4 718	14 054	7 530	(D)	9 776	(D)	(Z)	(Z)	(D)
HIGHWAYS, STREETS, AND RELATED WORK SUCH AS INSTALLATION OF GUARD RAILS, HIGHWAY SIGNS, LIGHTING, ETC.											
All establishments specializing in type -----	281	2 556	57 087	187 148	165 635	180 379	111 876	6 769	10	8	18
Establishments with —											
100 percent specialization -----	188	1 538	30 007	101 396	101 396	96 722	52 906	4 674	15	12	25
90 to 99 percent specialization -----	(S)	233	5 072	17 476	16 485	16 739	12 931	738	26	24	39
80 to 89 percent specialization -----	3	74	2 678	7 761	6 461	7 468	4 917	293	(Z)	(Z)	(Z)
70 to 79 percent specialization -----	26	460	12 062	37 291	27 128	(D)	26 111	(D)	16	21	(D)
60 to 69 percent specialization -----	17	183	5 008	14 984	9 634	(D)	9 509	(D)	19	9	(D)
51 to 59 percent specialization -----	4	68	2 259	8 240	4 532	7 987	5 502	253	23	15	20
OUTDOOR SWIMMING POOLS											
All establishments specializing in type -----	3 515	21 965	436 324	1 926 295	1 891 298	1 495 681	918 576	430 614	3	4	8
Establishments with —											
100 percent specialization -----	3 202	20 195	404 077	1 796 703	1 796 703	1 386 820	854 013	409 884	3	4	8
90 to 99 percent specialization -----	97	499	9 248	36 795	34 428	30 035	18 919	(S)	19	30	(S)
80 to 89 percent specialization -----	(S)	340	4 778	19 890	16 381	18 311	11 798	*1 579	25	32	72
70 to 79 percent specialization -----	(S)	148	3 401	*11 865	*8 914	8 070	5 638	(S)	28	42	(S)
60 to 69 percent specialization -----	60	394	6 284	29 877	18 416	24 454	12 721	5 422	22	26	30
51 to 59 percent specialization -----	29	390	8 537	31 165	16 455	27 992	15 488	3 173	21	18	32
FENCING											
All establishments specializing in type -----	3 095	19 692	368 146	1 403 940	1 365 168	1 308 283	722 059	95 657	4	4	9
Establishments with —											
100 percent specialization -----	2 879	17 084	302 323	1 186 190	1 186 190	1 116 206	617 185	69 984	4	4	12
90 to 99 percent specialization -----	87	1 389	36 673	112 209	107 756	99 887	48 495	12 322	11	8	9
80 to 89 percent specialization -----	30	219	3 082	16 295	13 430	15 333	7 630	*962	30	31	72
70 to 79 percent specialization -----	(S)	540	10 960	38 675	28 290	36 050	22 970	2 625	13	14	25
60 to 69 percent specialization -----	6	278	9 761	32 721	20 079	24 255	16 312	8 466	(Z)	(Z)	(Z)
51 to 59 percent specialization -----	32	182	5 347	17 851	9 424	16 553	9 467	1 298	25	22	11
BLAST FURNACES, PETROLEUM REFINERIES, CHEMICAL COMPLEXES, ETC.											
All establishments specializing in type -----	247	12 316	328 913	748 931	666 989	714 644	598 131	34 288	1	2	17
Establishments with —											
100 percent specialization -----	155	5 641	149 165	335 052	335 052	315 919	259 908	19 132	2	3	31
90 to 99 percent specialization -----	18	1 991	64 744	158 527	147 795	148 692	129 781	9 835	2	1	(Z)
80 to 89 percent specialization -----	15	1 917	40 639	86 779	70 809	85 358	75 454	1 421	(Z)	(Z)	(Z)
70 to 79 percent specialization -----	19	1 187	(D)	(D)	(D)	(D)	58 058	642	4	(D)	3
60 to 69 percent specialization -----	26	1 495	37 601	90 297	57 392	87 060	71 139	3 237	7	5	4
51 to 59 percent specialization -----	*14	86	(D)	(D)	(D)	(D)	3 791	*21	17	(D)	71
POWER PLANTS AND COGENERATION PLANTS, EXCEPT NUCLEAR											
All establishments specializing in type -----	87	1 967	58 763	135 660	109 885	128 120	114 839	7 540	6	4	3
Establishments with —											
100 percent specialization -----	57	740	23 254	52 412	52 412	50 978	44 307	1 434	13	9	14
90 to 99 percent specialization -----	*11	177	3 872	8 590	7 931	8 346	6 804	244	20	15	31
80 to 89 percent specialization -----	3	341	12 327	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)
70 to 79 percent specialization -----	*4	138	2 056	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
60 to 69 percent specialization -----	8	235	6 948	21 362	12 929	21 238	14 769	*124	19	11	42
51 to 59 percent specialization -----	5	336	10 306	22 274	12 176	(D)	16 842	(D)	(Z)	(Z)	(D)

Table 9. Quarterly Construction Worker Employment for Establishments With Payroll by State: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December						
	A	B	C	D	E	F	A	B	C	D	E	F
United States	25 270	157 231	139 491	164 167	171 685	153 583	1	1	1	1	1	1
Alabama	392	2 491	2 376	2 490	2 456	2 640	8	7	8	8	7	7
Alaska	49	(D)	499	(D)	(D)	553	22	(D)	4	(D)	(D)	5
Arizona	524	3 694	3 200	3 870	4 114	3 594	8	11	8	10	11	13
Arkansas	198	1 096	1 037	1 138	1 164	1 047	12	9	10	9	10	10
California	3 141	20 354	19 740	20 491	21 278	19 907	3	2	2	2	2	2
Colorado	372	2 168	1 812	2 501	2 363	1 996	9	8	8	9	8	8
Connecticut	433	2 381	1 893	2 518	2 752	2 362	8	5	5	5	5	5
Delaware	51	482	427	488	480	535	20	8	10	9	9	6
District of Columbia	3	(D)	10	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)
Florida	2 124	10 100	9 160	10 680	10 835	9 724	4	4	4	4	4	4
Georgia	631	3 584	3 234	3 636	3 608	3 855	7	5	5	6	5	4
Hawaii	95	(D)	(D)	(D)	(D)	(D)	16	(D)	(D)	(D)	(D)	(D)
Idaho	127	(D)	(D)	(D)	(D)	(D)	16	(D)	(D)	(D)	(D)	(D)
Illinois	874	7 183	5 364	8 221	8 303	6 842	7	9	5	13	11	6
Indiana	435	3 483	3 154	3 368	3 930	3 482	8	4	4	5	6	4
Iowa	157	940	757	992	1 125	884	13	10	9	10	11	11
Kansas	270	1 060	952	1 050	1 196	1 040	11	9	9	9	7	10
Kentucky	303	1 141	1 004	1 212	1 221	1 128	9	10	11	10	10	10
Louisiana	471	5 610	5 606	5 676	5 558	5 598	8	3	3	3	4	3
Maine	116	(D)	(D)	(D)	(D)	(D)	16	(D)	(D)	(D)	(D)	(D)
Maryland	502	3 671	3 375	3 900	4 006	3 404	8	6	6	6	5	6
Massachusetts	581	3 495	2 839	3 681	3 919	3 540	7	5	5	5	5	4
Michigan	783	4 179	3 371	4 484	4 748	4 113	6	4	4	4	4	4
Minnesota	374	2 327	(D)	(D)	2 734	2 282	9	6	(D)	(D)	7	7
Mississippi	200	786	747	884	778	738	12	13	18	13	12	14
Missouri	496	3 069	2 789	3 399	3 430	2 659	8	5	5	6	6	6
Montana	112	(D)	(D)	(D)	(D)	(D)	17	(D)	(D)	(D)	(D)	(D)
Nebraska	119	(D)	(D)	(D)	(D)	(D)	17	(D)	(D)	(D)	(D)	(D)
Nevada	205	(D)	(D)	(D)	(D)	(D)	11	(D)	(D)	(D)	(D)	(D)
New Hampshire	101	480	387	510	595	428	13	12	15	12	11	14
New Jersey	963	5 768	5 291	6 106	6 362	5 311	6	4	4	4	4	4
New Mexico	136	(D)	(D)	(D)	(D)	15	(D)	(D)	(D)	(D)	(D)	(D)
New York	1 622	10 100	8 297	10 820	11 790	9 492	5	3	3	3	4	3
North Carolina	618	3 508	3 277	3 567	3 680	3 508	7	5	5	5	5	5
North Dakota	79	480	(D)	463	(D)	496	18	12	(D)	13	(D)	13
Ohio	942	5 869	4 934	5 810	6 539	6 192	6	3	4	4	4	3
Oklahoma	290	2 007	2 090	2 078	2 030	1 829	10	8	7	8	8	8
Oregon	428	1 558	1 347	1 654	1 765	1 467	9	9	8	10	10	11
Pennsylvania	1 097	6 912	5 411	7 167	8 543	6 530	5	4	3	3	3	6
Rhode Island	135	436	417	422	497	407	14	14	24	12	12	13
South Carolina	389	1 931	1 751	1 876	1 953	2 141	9	7	8	8	9	6
South Dakota	43	379	(D)	451	436	(D)	24	18	(D)	16	17	(D)
Tennessee	449	2 133	2 041	2 282	2 212	1 996	8	9	10	9	9	9
Texas	1 815	16 069	14 763	16 330	16 582	16 599	4	3	3	4	4	3
Utah	166	(D)	(D)	(D)	(D)	(D)	13	(D)	(D)	(D)	(D)	(D)
Vermont	46	217	152	235	277	204	27	19	19	20	21	21
Virginia	614	3 791	3 438	4 094	4 063	3 567	7	6	6	6	6	6
Washington	609	3 175	2 816	3 375	3 492	3 018	7	4	4	4	4	4
West Virginia	108	(D)	462	641	(D)	(D)	18	(D)	12	9	(D)	(D)
Wisconsin	382	1 881	1 519	2 172	2 151	1 681	9	8	8	10	8	8
Wyoming	97	528	481	556	629	447	18	12	11	12	14	11

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	13 667 090	25 130	12 014 145	6 583	1 652 945	10 814 314	26.4	1	1	1
Alabama -----	157 196	391	111 671	198	45 525	114 359	37.5	6	8	8
Alaska -----	69 705	41	63 960	20	5 745	44 072	58.2	4	3	31
Arizona -----	314 045	521	293 782	79	20 263	258 256	21.6	12	13	8
Arkansas -----	70 529	198	60 174	83	10 355	43 334	62.8	9	11	4
California -----	1 944 773	3 135	1 898 453	113	46 320	1 728 974	12.5	2	2	4
Colorado -----	212 552	372	163 301	102	49 251	155 127	37.0	6	8	5
Connecticut -----	252 384	433	211 202	202	41 182	175 638	43.7	4	5	8
Delaware -----	(D)	50	(D)	112	29 568	26 111	(D)	(D)	(D)	4
District of Columbia -----	44 539	3	296	212	44 243	43 970	1.3	7	(Z)	7
Florida -----	952 118	(S)	891 927	200	60 191	761 471	25.0	4	4	4
Georgia -----	255 883	(S)	215 205	158	40 678	329 015	-22.2	5	6	9
Hawaii -----	110 309	95	85 626	47	24 683	51 879	112.6	7	9	8
Idaho -----	(D)	127	(D)	54	3 256	(S)	(D)	(D)	(D)	14
Illinois -----	757 326	872	683 135	241	74 191	435 504	73.9	4	5	4
Indiana -----	276 685	432	220 684	235	56 001	163 654	69.1	5	6	6
Iowa -----	68 340	157	53 199	134	15 141	43 962	55.5	8	9	13
Kansas -----	82 174	270	64 983	133	17 192	63 063	30.3	9	10	15
Kentucky -----	121 419	303	84 571	233	36 848	77 097	57.5	9	12	6
Louisiana -----	336 331	470	300 614	102	35 717	179 418	87.5	4	4	4
Maine -----	(D)	116	(D)	60	6 987	41 576	(D)	(D)	(D)	11
Maryland -----	252 487	500	207 528	178	44 959	236 246	6.9	5	5	10
Massachusetts -----	327 405	575	282 385	152	45 020	368 677	-11.2	4	5	5
Michigan -----	389 204	782	368 924	110	20 279	338 492	15.0	4	4	4
Minnesota -----	195 408	374	180 908	78	14 499	138 104	41.5	7	7	4
Mississippi -----	70 133	200	50 846	116	19 286	43 320	61.9	9	12	3
Missouri -----	231 847	495	207 687	101	24 159	183 933	26.0	4	5	10
Montana -----	37 110	112	32 777	41	4 333	15 210	144.0	15	17	11
Nebraska -----	43 577	119	31 271	72	12 306	32 596	33.7	12	16	12
Nevada -----	140 721	(S)	115 889	93	24 832	80 586	74.6	9	11	4
New Hampshire -----	51 541	(S)	35 922	112	15 619	57 615	-10.5	13	18	14
New Jersey -----	531 985	936	439 124	215	92 860	546 861	-2.7	4	4	2
New Mexico -----	71 926	128	63 923	49	8 002	40 201	78.9	12	13	6
New York -----	1 078 631	1 613	920 329	340	158 302	1 031 635	4.6	3	3	3
North Carolina -----	263 116	617	221 747	177	41 369	219 228	20.0	5	5	7
North Dakota -----	26 084	79	21 932	34	4 152	13 662	90.9	13	15	8
Ohio -----	474 490	941	421 349	180	53 142	360 557	31.6	4	4	6
Oklahoma -----	118 387	289	103 237	88	15 150	92 646	27.8	9	10	13
Oregon -----	138 694	428	114 588	102	24 106	81 039	71.1	7	9	9
Pennsylvania -----	535 237	1 080	472 678	224	62 559	434 787	23.1	3	4	2
Rhode Island -----	44 819	134	36 494	66	8 326	55 926	-19.9	14	16	18
South Carolina -----	135 104	(S)	111 290	174	23 815	114 572	17.9	9	11	7
South Dakota -----	33 807	43	24 965	45	8 843	15 039	124.8	11	15	8
Tennessee -----	178 284	447	150 201	122	28 083	161 928	10.1	8	9	5
Texas -----	1 166 254	1 815	1 104 934	123	61 320	687 705	69.6	4	4	1
Utah -----	80 383	165	73 250	43	7 133	51 683	55.5	10	11	8
Vermont -----	18 266	46	16 350	49	1 917	22 224	-17.8	22	24	4
Virginia -----	312 318	614	242 436	289	69 883	309 304	1.0	6	7	5
Washington -----	284 977	(S)	248 559	101	36 418	141 115	101.9	4	4	2
West Virginia -----	70 507	108	37 759	166	32 748	26 374	167.3	8	14	6
Wisconsin -----	166 858	382	153 594	128	13 263	130 600	27.8	7	7	14
Wyoming -----	33 046	97	20 121	91	12 926	26 575	24.4	12	19	4

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
All kinds of business	14 162 323	11 294 202	1	1
SPECIAL TRADE CONTRACTORS				
Antenna installation contractor, except household type	86 306	78 139	10	11
Asbestos removal, lead paint removal, and radon remediation contractor	2 104 122	(NA)	2	(NA)
Concrete cutting contractor	251 708	(NA)	5	(NA)
Fence construction contractor	1 695 788	1 305 172	3	3
House moving contractor	80 872	134 851	12	9
Insulation contractor, pipe and duct work	1 018 942	(NA)	2	(NA)
Modular furniture systems attachment and installation contractor	406 190	(NA)	5	(NA)
Ornamental metal contractor	411 233	552 221	4	3
Sandblasting contractor, building exteriors	275 879	168 857	7	10
Scaffolding construction contractor	309 474	121 012	2	4
Service station equipment installation contractor	832 258	513 698	3	4
Special cases	1 383 295	(NA)	3	(NA)
Swimming pool contractor	1 880 490	1 995 236	4	3
Test boring or core drilling contractor for construction	441 123	178 959	4	5
Waterproofing, dampproofing and fireproofing contractor	1 062 588	840 799	2	3
Welding contractor, operating at the site of construction	584 982	417 013	3	4
Other construction activities	558 694	2 979 261	3	(NA)
OTHER BUSINESS ACTIVITIES				
Retail trade	195 778	252 007	4	4
Wholesale trade	74 384	59 713	4	7
Other business activities	214 606	179 661	3	3
Kind of business activity, n.s.k.	293 611	1 517 603	3	3

Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees**	8.1	7.6	1
Number of construction workers	6.2	6.1	1
Number of all other employees	1.9	1.5	1
Payroll, all employees \$1,000 ..	175.5	133.2	1
Payroll, construction workers do ..	123.5	97.8	1
Payroll, other employees do ..	52.1	35.4	1
Dollar value of business done do ..	560.4	486.9	1
Value of construction work do ..	540.8	466.2	1
Cost of materials, components, supplies, and fuels do ..	180.1	159.1	1
Construction work subcontracted to others do ..	53.1	42.3	3
Rental cost for machinery, equipment, and buildings do ..	11.8	8.6	2
Capital expenditures, other than land do ..	11.9	8.9	5
Gross book value of depreciable assets do ..	85.2	59.4	2
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 ..	21.7	17.5	(Z)
Dollar value of business done do ..	69.3	64.1	1
Value added†† do ..	40.5	37.6	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000 ..	19.8	16.0	(Z)
Value of construction work do ..	86.9	76.4	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000 ..	27.9	23.8	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees do ..	.325	.286	1
Cost of materials, components, supplies, and fuels do ..	.333	.341	1
Cost of construction work subcontracted out to others do ..	.098	.091	2
Value of construction work subcontracted in from others do ..	.377	.326	2
Rental cost for machinery, equipment, and buildings do ..	.022	.018	2

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
United States -----	8.1	21.7	86.9	.325	.333	.098	.377	.022
Alabama -----	7.8	18.0	60.8	.363	.341	.070	.302	(D)
Alaska -----	(D)	(D)	526	(D)	(D)	.049	.372	(D)
Arizona -----	9.4	18.0	86.4	.278	.285	.205	.455	.021
Arkansas -----	7.2	15.8	59.3	.345	.453	.063	.236	(D)
California -----	8.5	24.0	97.6	.321	.313	.119	.467	.025
Colorado -----	7.6	20.5	83.1	.321	.347	.050	.598	.036
Connecticut -----	7.3	28.0	116.8	.320	.296	.104	.345	.025
Delaware -----	11.6	20.6	66.5	.381	.306	.066	.255	.039
District of Columbia -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	6.4	18.7	92.7	.272	.356	.143	.361	.021
Georgia -----	7.5	21.0	80.4	.345	.315	.085	.459	.021
Hawaii -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Idaho -----	(D)	(D)	(D)	(D)	.351	.066	(D)	.009
Illinois -----	10.6	26.3	103.1	.329	.284	.107	.294	.018
Indiana -----	10.2	21.1	75.6	.355	.312	.063	.357	.020
Iowa -----	8.1	17.6	68.7	.347	.299	.065	.369	.014
Kansas -----	5.0	21.5	72.5	.374	.336	.082	.313	.018
Kentucky -----	4.9	18.0	86.5	.272	.370	.062	(D)	(D)
Louisiana -----	14.1	20.8	62.1	.396	.318	.060	.284	.023
Maine -----	6.4	(D)	(D)	(D)	.466	(D)	.172	.017
Maryland -----	9.8	21.5	79.0	.367	.340	.090	.375	.021
Massachusetts -----	7.9	24.2	95.7	.334	.346	.076	.425	.023
Michigan -----	7.2	22.3	96.7	.312	.327	.125	.405	.019
Minnesota -----	7.9	24.2	87.0	.352	(D)	.080	.397	.025
Mississippi -----	5.2	(D)	68.4	(D)	.398	.052	.213	(D)
Missouri -----	8.4	20.9	82.8	.343	.339	.078	.262	.016
Montana -----	(D)	(D)	(D)	.277	.493	.035	(D)	(D)
Nebraska -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nevada -----	(D)	(D)	(D)	(D)	(D)	(D)	.433	(D)
New Hampshire -----	6.8	(D)	104.3	(D)	.324	.058	(D)	.016
New Jersey -----	7.8	24.6	98.9	.326	.331	.092	.328	.025
New Mexico -----	(D)	(D)	(D)	.251	.375	.044	.507	(D)
New York -----	8.4	23.3	102.4	.308	.348	.106	.301	.018
North Carolina -----	7.2	18.4	69.3	.337	(D)	.069	.377	.021
North Dakota -----	7.7	20.9	71.9	.367	(D)	(D)	.719	(D)
Ohio -----	8.3	22.4	87.6	.342	.370	.059	.349	.023
Oklahoma -----	8.7	17.9	65.2	.345	.331	.067	.419	.022
Oregon -----	4.5	18.7	74.9	.311	.315	(D)	.392	.025
Pennsylvania -----	8.1	21.4	83.5	.329	.332	.081	.400	.024
Rhode Island -----	4.1	23.0	106.1	.276	.367	.058	.347	.015
South Carolina -----	6.4	17.0	75.0	.293	.355	.081	.248	.022
South Dakota -----	(D)	(D)	88.7	.237	.345	(S)	(D)	(D)
Tennessee -----	6.3	18.0	80.7	.299	.330	.118	.299	.015
Texas -----	10.9	20.6	75.9	.334	.355	.100	.380	.021
Utah -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Vermont -----	(D)	(D)	93.0	(D)	(D)	(D)	* .436	(D)
Virginia -----	7.9	18.8	75.8	.317	.336	.095	.393	.021
Washington -----	6.7	23.9	90.8	.340	.314	.077	.430	.021
West Virginia -----	(D)	(D)	(D)	.400	.245	.054	.096	(D)
Wisconsin -----	6.5	21.7	87.5	.329	.371	.057	.401	.020
Wyoming -----	6.3	12.6	43.9	.331	.400	.127	.318	.052

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
- **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
- **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- **Outdoor swimming pools.** Includes wading pools and reflecting pools.
- **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
- **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
- **Fencing.** Includes all types of fencing.
- **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
- **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
- **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- **Harbor and port facilities.** Includes docks, piers, and wharves.
- **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
- **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
- **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
- **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
- **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

Nonbuilding construction:

- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

1992

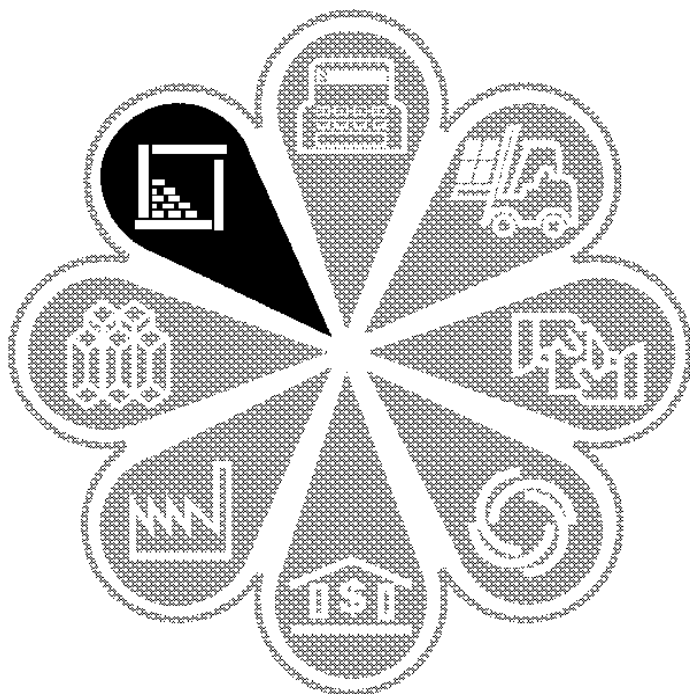
Census of Construction Industries

CC92-I-27

INDUSTRY SERIES

United States Summary

Establishments With
and Without Payroll



U.S. Department of Commerce
Economics and Statistics Administration
BUREAU OF THE CENSUS

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If you have any questions concerning the statistics in this report, call 301-457-4680.

1992 Census of Construction Industries

CC92-I-27

INDUSTRY SERIES

United States Summary

Establishments With
and Without Payroll

Issued December 1995



U.S. Department of Commerce
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David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Martha Farnsworth Riche, Director



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(X)	Not applicable.
(Z)	Less than half of the unit shown.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For U.S.	By industry	By employment size	By size class of dollar value of business done	By type, class, kind of business, and location of construction ¹	Auxiliary establishments
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery and equipment	5, 6					
End of year—total	2, 5, 6	2	8	9		
End of year—buildings, machinery and equipment	5, 6					
Depreciation charges during year—buildings, machinery and equipment	5, 6					
Capital expenditures:						
Total capital expenditures	2, 5, 6	2	8	9		
New buildings—machinery and equipment	5, 6					
Used buildings—machinery and equipment	5, 6					
Communication services, costs for	3, 4					
Employees:						
All employees—average number	1, 2, 3, 4	1, 2	8	9		
Construction workers—average number	2, 3, 4, 11	2, 11				
Construction workers—quarterly	3, 4, 11	11				
Other employees—average number	3, 4					
Establishments—number in business during year:						
All	1	1				
With payroll	1, 2, 3, 4, 7, 11	1, 2, 11	8	9		17
Without payroll	1	1				
Fringe benefits—legally required and voluntary expenditures	3, 4					
Inventories	7					
Materials, components, supplies, and fuels—costs for	2, 3, 4	2	8	9		
Ownership—private or government owned	3, 4					
Payroll:						
First-quarter, all employees	3, 4					
Annual:						
All employees	2, 3, 4	2	8	9		17
Construction workers	2, 3, 4	2				
Other employees	3, 4					
Power, fuels, and lubricants—costs for	3, 4					
Proprietors and working partners:						
All establishments	1	1				
Establishments with payroll	1, 3, 4	1				
Establishments without payroll	1	1				
Ratios, selected industry	15, 16	15, 16				
Receipts and value:						
Dollar value of business done:						
All establishments	1	1				
Establishments with payroll	1, 3, 4	1	8	9	13, 14	
Establishments without payroll	1	1				
Value of construction work, total	2, 3, 4	2	8	9	10, 12	
For work subcontracted in from others	3, 4					
Other business receipts	3, 4					
Net value of construction work	2, 3, 4	2	8	9		
Value added	2, 3, 4	2	8	9		

See footnotes at end of table.

Statistics	For U.S.	By industry	By employ- ment size	By size class of dollar value of business done	By type, class, kind of business, and location of con- struction ¹	Auxiliary establish- ments
Rental costs:						
Total.	2, 3, 4	2	8	9		
For machinery and equipment	3, 4					
For buildings	3, 4					
Repairs to buildings and other structures	3, 4					
Repairs to machinery and equipment	3, 4					
Subcontract work to others, costs for	2, 3, 4	2	8	9		

Note: Data for 1987 and earlier years are also available in some of these tables.
¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

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United States Summary

Establishments With and Without Payroll

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SUMMARY OF FINDINGS

This report summarizes data previously published in 26 separate industry reports covering construction establishments with payroll. In addition, limited data on construction establishments with no payroll during 1992 obtained from administrative records of the Federal Government are included. (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction or construction on their own account for sale, as defined in the *Standard Industrial Classification Manual: 1987* (SIC). The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters.

During 1992, there were nearly 2 million establishments in the United States operating in the construction industries. These establishments accounted for \$582 billion in total value of business done.

Most of the 2 million construction establishments were small. Of the total, 1.3 million were nonemployers, and over half of the employer establishments had less than 5 employees. However, the 214,207 establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 80 percent of the total value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1992, the establishments with paid employees accounted for \$539 billion in total dollar value of business done. Of this amount, \$528 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$137 billion, leaving net value of construction work of \$391 billion. In addition, these establishments paid out \$26 billion for the cost of fuels, power, rental of equipment and buildings, and the cost of selected purchased services. Value added for 1992 was \$235 billion. (See Introduction and appendixes for explanation of terms.)

There were 572,851 establishments with total employment averaging 4,668,280 during the year. Total payroll for 1992 was \$118 billion.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 1.3 million establishments with no payroll classified as construction. According to administrative records of the Federal Government, their value of business done during 1992 was \$43 billion. Most of these establishments, about 82 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1.

1992
1987

Figure 1. **Selected Costs Per Dollar Value of Business Done**
(Percent)

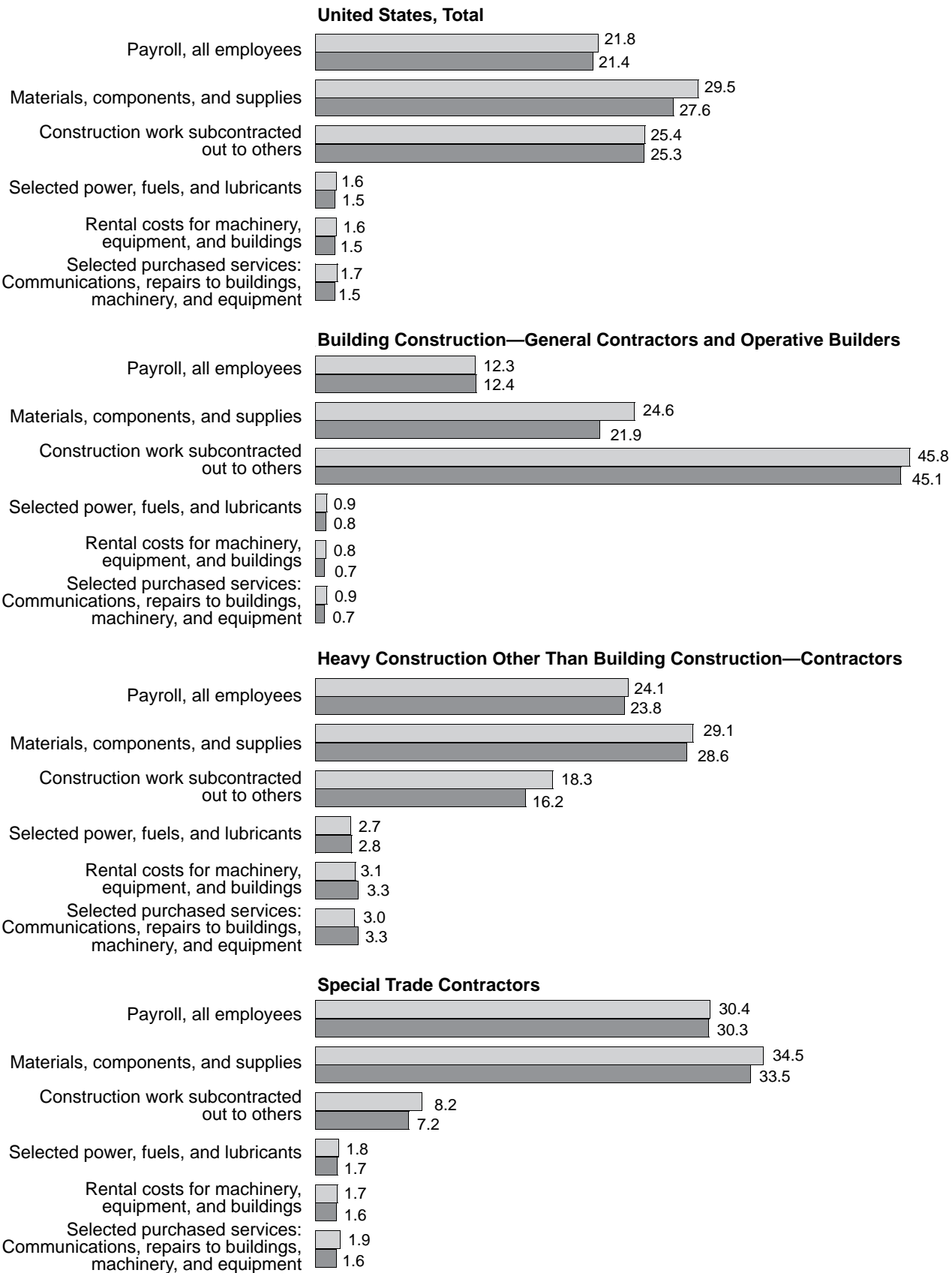


Figure 2. **Value of Construction Work by Type of Construction**
(Percent)

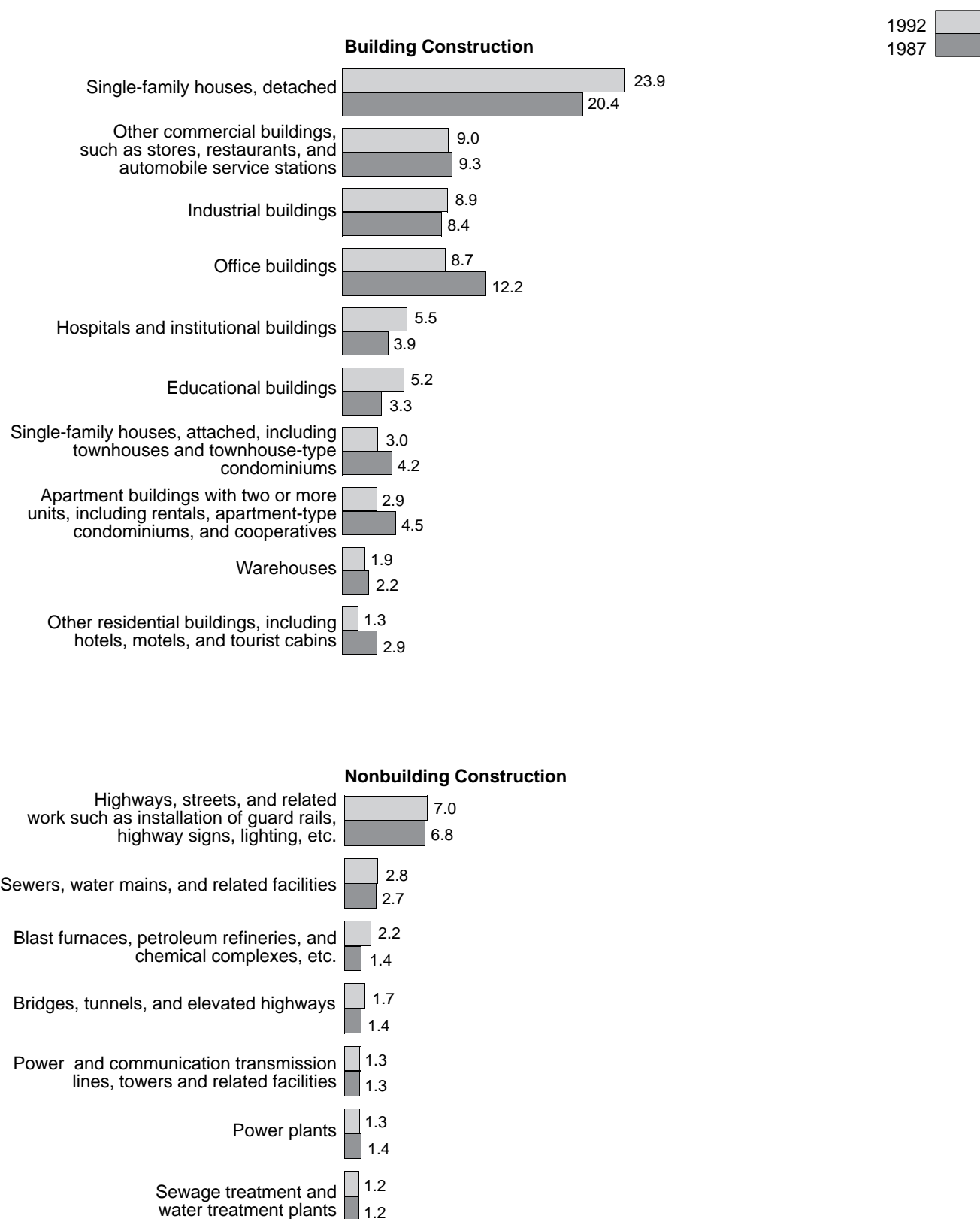


Table 1. Summary Statistics for Establishments With and Without Payroll: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprietors and working partners	All employees**	Dollar value of business done		Proprietors and working partners	Dollar value of business done ¹		Proprietors and working partners	All employees**	Dollar value of business done		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1992													
15, 16, 17	Construction industries -----	1 922 631	1 569 215	4 668 280	581 630 401	1 349 780	1 318 174	42 545 744	572 851	251 041	4 668 280	539 084 657	(Z)	(Z)
15	Building construction—general contractors and operative builders -----	395 043	277 129	1 096 859	236 462 718	226 636	206 080	16 231 503	168 407	71 049	1 096 859	220 231 215	(Z)	(Z)
152	General contractors, residential buildings -----	295 870	219 339	452 557	71 578 639	181 884	162 904	14 155 785	113 986	56 435	452 557	57 422 854	1	1
1531	Operative builders -----	45 076	31 944	114 194	47 452 859	28 087	27 171	1 325 148	16 989	4 773	114 194	46 127 711	1	1
154	General contractors, nonresidential buildings -----	54 097	25 845	530 108	117 431 220	16 665	16 005	750 570	37 432	9 840	530 108	116 680 650	(Z)	(Z)
16	Heavy construction other than building construction—contractors -----	59 464	32 569	799 422	99 319 134	22 284	21 072	790 952	37 180	11 497	799 422	98 528 182	(Z)	(Z)
1611	Highway and street construction ---	15 000	7 501	257 356	36 809 447	4 910	4 825	163 613	10 090	2 676	257 356	36 645 834	(Z)	(Z)
162	Heavy construction, except highway -----	44 464	25 068	542 066	62 509 687	17 374	16 247	627 339	27 090	8 821	542 066	61 882 348	(Z)	(Z)
17	Special trade contractors -----	1 468 123	1 259 517	2 771 999	245 848 549	1 100 860	1 091 022	25 523 289	367 263	168 495	2 771 999	220 325 260	(Z)	(Z)
1711	Plumbing, heating, and air-conditioning -----	168 663	119 985	612 516	60 752 005	93 268	91 391	3 084 024	75 395	28 594	612 516	57 667 981	(Z)	(Z)
1721	Painting and paper hanging -----	207 594	197 264	162 587	11 514 299	175 674	177 264	2 774 525	31 920	20 000	162 587	8 739 774	1	1
1731	Electrical work -----	135 087	96 728	487 072	42 555 710	81 065	78 697	1 828 669	54 022	18 031	487 072	40 727 041	(Z)	(Z)
174	Masonry, stonework, tile setting, and plastering -----	149 736	129 532	388 573	27 389 802	101 952	102 733	2 181 396	47 784	26 799	388 573	25 208 406	(Z)	(Z)
175	Carpentry and floor work -----	405 695	388 503	226 549	24 577 849	357 289	359 177	7 006 339	48 406	29 326	226 549	17 571 510	1	1
1761	Roofing, siding, and sheet metal work -----	91 300	76 821	215 545	18 567 644	63 731	64 333	1 593 033	27 569	12 488	215 545	16 974 611	1	1
1771	Concrete work -----	54 875	42 055	192 539	15 256 182	28 752	28 911	660 147	26 123	13 144	192 539	14 596 035	1	1
1781	Water well drilling -----	5 113	3 355	19 346	1 832 037	1 475	1 604	80 747	3 638	1 751	19 346	1 751 290	2	2
179	Miscellaneous special trade contractors -----	250 059	205 276	467 272	43 403 020	197 654	186 912	6 314 409	52 405	18 364	467 272	37 088 611	(Z)	(Z)
	1987													
15, 16, 17	Construction industries -----	1 904 598	1 482 273	5 014 598	578 421 743	1 368 322	1 343 572	63 484 147	536 276	138 701	5 014 598	514 937 596	(Z)	(Z)
15	Building construction—general contractors and operative builders -----	443 428	297 549	1 278 422	252 552 632	285 789	262 578	27 364 492	157 639	34 971	1 278 422	225 188 140	(Z)	(Z)
152	General contractors, residential buildings -----	364 595	269 332	477 999	79 329 638	266 074	243 557	25 631 377	98 521	25 775	477 999	53 698 261	(Z)	1
1531	Operative builders -----	40 177	22 416	168 940	59 072 275	19 411	18 969	1 598 238	20 766	3 447	168 940	57 474 037	1	1
154	General contractors, nonresidential buildings -----	38 655	5 798	631 481	114 150 717	(S)	(S)	(S)	38 351	5 746	631 481	114 015 840	(Z)	(Z)
16	Heavy construction other than building construction—contractors -----	56 904	26 898	827 126	87 518 148	20 307	19 788	1 845 580	36 597	7 110	827 126	85 672 568	(Z)	(Z)
1611	Highway and street construction ---	15 853	6 591	284 380	36 052 415	4 867	4 954	524 380	10 986	1 637	284 380	35 528 035	(Z)	(Z)
162	Heavy construction, except highway -----	41 050	20 306	542 744	51 465 732	15 440	14 834	1 321 200	25 610	5 472	542 744	50 144 532	(Z)	(Z)
17	Special trade contractors -----	1 404 266	1 157 826	2 909 050	238 350 963	1 062 226	1 061 206	34 274 075	342 040	96 620	2 909 050	204 076 888	(Z)	(Z)
1711	Plumbing, heating, and air-conditioning -----	161 578	109 325	617 333	54 397 222	92 012	91 343	4 177 569	69 566	17 982	617 333	50 219 653	(Z)	(Z)
1721	Painting and paper hanging -----	196 458	180 098	169 968	11 658 175	166 591	168 573	3 630 202	29 867	11 525	169 968	8 027 973	1	1
1731	Electrical work -----	125 159	86 116	509 309	38 863 014	75 723	74 710	2 587 757	49 436	11 406	509 309	36 275 257	1	(Z)
174	Masonry, stonework, tile setting, and plastering -----	146 327	117 841	456 961	31 406 516	100 145	101 216	3 561 418	46 182	16 625	456 961	27 845 098	(Z)	(Z)
175	Carpentry and floor work -----	382 118	354 454	235 010	23 476 144	337 935	340 217	8 252 005	44 183	14 237	235 010	15 224 139	(Z)	1
1761	Roofing, siding, and sheet metal work -----	79 890	61 946	231 137	17 319 518	54 217	54 930	2 060 627	25 673	7 016	231 137	15 258 891	1	1
1771	Concrete work -----	49 874	34 155	218 194	16 478 407	26 452	26 989	1 266 358	23 422	7 166	218 194	15 212 049	1	1
1781	Water well drilling -----	8 601	6 567	17 598	1 653 360	5 187	5 417	285 013	3 414	1 150	17 598	1 368 347	2	2
179	Miscellaneous special trade contractors -----	254 254	207 317	453 532	43 098 601	203 964	197 811	8 453 126	50 290	9 506	453 532	34 645 475	(Z)	(Z)

Note: Number of establishments in this and subsequent tables represents those in business at any time during the year.

¹For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

Table 2. General Statistics for Establishments With Payroll by Industry: 1992 and 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	1992							
		Number of establish- ments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
15, 16, 17	Construction industries -----	572 851	4 668 280	3 596 200	117 729 651	83 048 158	528 105 847	391 189 891	234 617 817
15	Building construction—general contractors and operative builders -----	168 407	1 096 859	759 057	27 077 574	16 124 696	215 628 967	114 722 152	63 116 790
152	General contractors, residential buildings:								
1521	Single-family houses -----	107 495	403 754	296 236	7 277 890	4 869 474	48 633 331	33 660 224	17 183 012
1522	Other residential buildings -----	6 490	48 803	35 107	1 160 562	717 595	7 834 956	4 337 918	2 453 669
1531	Operative builders -----	16 989	114 194	49 693	3 358 753	1 044 923	44 588 033	26 843 321	15 288 760
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	7 693	122 970	92 068	3 476 400	2 309 756	20 585 807	10 967 289	6 437 735
1542	Nonresidential buildings, n.e.c. -----	29 739	407 138	285 952	11 803 969	7 182 947	93 986 840	38 913 401	21 753 615
16	Heavy construction other than building construction— contractors -----	37 180	799 422	647 406	23 728 285	17 621 730	95 571 457	77 526 108	49 165 312
1611	Highway and street construction -----	10 090	257 356	211 161	7 357 719	5 456 665	35 331 607	27 862 971	15 710 659
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	1 041	43 701	36 116	1 485 491	1 125 201	7 198 275	5 315 950	3 078 306
1623	Water, sewer, and utility lines -----	10 233	194 252	160 105	5 624 369	4 252 249	20 205 048	17 587 363	11 734 058
1629	Heavy construction, n.e.c. -----	15 816	304 113	240 024	9 260 705	6 787 615	32 836 527	26 759 824	18 642 289
17	Special trade contractors -----	367 263	2 771 999	2 189 738	66 923 793	49 301 733	216 905 423	198 941 631	122 335 715
1711	Plumbing, heating, and air-conditioning -----	75 395	612 516	455 117	16 613 239	11 781 219	56 902 406	50 755 709	29 431 529
1721	Painting and paper hanging -----	31 920	162 587	136 427	3 164 065	2 470 237	8 689 828	8 094 749	5 854 779
1731	Electrical work -----	54 022	487 072	379 052	13 623 816	10 038 862	40 259 410	38 541 019	23 548 293
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	22 637	147 892	129 762	2 882 520	2 366 390	8 457 864	7 955 909	5 146 139
1742	Plastering, drywall, and insulation work -----	18 648	206 670	173 465	4 910 081	3 825 766	14 055 774	12 824 151	8 143 169
1743	Terrazzo, tile, marble, and mosaic work -----	6 499	34 012	26 941	774 788	568 215	2 438 641	2 322 563	1 358 017
175	Carpentry and floor work:								
1751	Carpentry -----	38 210	177 601	145 394	3 488 844	2 683 124	12 852 280	11 334 464	6 759 711
1752	Floor laying and other floorwork -----	10 196	48 948	36 434	1 065 150	723 556	4 427 519	4 032 451	2 165 761
1761	Roofing, siding, and sheet metal work -----	27 569	215 545	168 764	4 622 510	3 229 953	16 787 979	15 589 833	8 905 974
1771	Concrete work -----	26 123	192 539	160 750	4 038 030	3 092 990	14 422 908	13 179 429	7 703 117
1781	Water well drilling -----	3 638	19 346	14 683	443 641	322 593	1 727 355	1 675 998	994 814
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	3 792	57 986	47 138	1 628 902	1 226 900	4 952 038	4 486 702	3 020 993
1793	Glass and glazing work -----	4 590	32 067	21 352	795 946	494 657	2 724 467	2 634 085	1 423 934
1794	Excavation work -----	13 898	77 126	62 437	1 816 814	1 400 643	6 869 692	6 129 178	4 339 605
1795	Wrecking and demolition work -----	966	13 112	10 409	296 028	214 621	1 059 133	927 986	775 026
1796	Installing building equipment, n.e.c. -----	3 889	82 648	64 380	2 324 139	1 742 093	6 611 040	6 132 131	4 494 378
1799	Special trade contractors, n.e.c. -----	25 270	204 333	157 231	4 435 282	3 119 913	13 667 090	12 325 277	8 270 475

1992—Con.						1987			Relative standard error of estimate (percent) for column—			SIC code
Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
I	J	K	L	M	N	O	P	Q	B	G	M	
167 550 884	136 915 956	142 608 034	8 364 021	7 902 110	76 099 045	5 014 598	495 346 312	227 934 191	(Z)	(Z)	1	15, 16, 17
56 207 610	100 906 815	6 819 329	1 658 797	1 442 664	13 384 270	1 278 422	212 628 500	65 514 147	(Z)	(Z)	1	15
17 312 728 2 003 300	14 973 107 3 497 038	1 846 577 336 678	404 408 61 732	461 775 51 654	3 617 961 487 125	396 291 81 708	39 098 146 13 315 544	14 969 716 3 658 560	1 2	1 2	3 6	152 1521 1522
13 094 239	17 744 712	380 183	154 484	236 229	2 493 600	168 940	48 959 809	15 173 454	1	1	5	1531
4 935 183 18 862 161	9 618 518 55 073 439	1 349 414 2 906 477	252 084 786 089	149 752 543 254	1 606 808 5 178 776	143 001 488 480	21 461 568 89 793 431	6 881 749 24 830 667	1 (Z)	1 (Z)	3 2	154 1541 1542
31 317 521	18 045 349	16 995 592	3 044 412	3 085 883	32 122 594	827 126	82 285 352	44 940 458	(Z)	(Z)	1	16
13 466 539	7 468 636	7 334 384	1 126 315	1 281 549	13 727 083	284 380	34 161 427	17 119 634	(Z)	(Z)	1	1611
2 326 306 6 078 014 9 446 662	1 882 325 2 617 685 6 076 703	874 650 3 763 945 5 022 613	182 852 753 998 981 246	155 163 765 509 883 662	1 602 798 6 980 524 9 812 189	47 494 197 632 297 618	5 480 936 17 010 019 25 632 969	2 430 434 10 089 749 15 300 639	1 1 (Z)	1 (Z) (Z)	1 2 2	162 1622 1623 1629
80 025 752	17 963 792	118 793 113	3 660 812	3 373 563	30 592 181	2 909 050	200 432 460	117 479 586	(Z)	(Z)	1	17
22 089 755	6 146 698	29 450 247	860 629	754 154	6 537 542	617 333	49 503 323	25 911 790	(Z)	(Z)	2	1711
2 289 916	595 079	4 487 597	158 190	144 930	1 084 015	169 968	7 953 323	5 716 473	1	1	3	1721
15 460 357	1 718 391	22 410 612	550 171	508 188	4 328 892	509 309	35 838 226	21 816 585	(Z)	(Z)	2	1731
2 851 160 4 852 512 1 007 752	501 955 1 231 623 116 078	6 012 068 11 646 187 1 909 362	120 700 174 422 30 363	135 397 141 601 27 446	1 172 557 1 183 465 283 791	168 978 253 563 34 420	8 714 161 16 426 850 2 271 593	5 475 753 9 747 631 1 317 632	1 1 2	1 1 1	3 3 7	174 1741 1742 1743
4 752 932 1 980 223	1 517 816 395 068	7 396 694 2 683 933	156 574 62 406	155 099 46 221	1 223 326 400 507	190 431 44 579	11 243 863 3 651 435	6 077 619 1 880 303	1 1	1 1	4 6	175 1751 1752
6 870 490	1 198 147	7 065 888	238 569	232 716	2 296 335	231 137	15 027 806	8 524 431	1	1	3	1761
5 649 439	1 243 479	8 806 421	312 771	330 208	3 234 505	218 194	15 055 670	8 443 003	1	1	3	1771
705 118	51 357	260 302	26 904	69 501	887 158	17 598	1 330 056	779 621	2	2	8	1781
1 608 375 1 399 569 1 973 899 207 375 1 776 845 4 550 035	465 336 90 382 740 514 131 147 478 909 1 341 813	3 423 692 1 908 755 3 942 704 433 308 1 806 984 5 148 359	139 831 58 274 304 352 52 055 116 126 298 476	77 261 23 581 331 411 23 130 71 517 301 201	814 369 291 378 3 678 478 302 912 721 129 2 151 822	65 348 40 511 95 329 14 109 62 151 176 084	4 862 655 3 222 472 8 244 398 912 484 5 359 826 10 814 313	3 253 345 1 700 519 5 707 716 781 854 3 723 074 6 622 229	1 1 1 2 1 1	1 1 1 2 (Z) 1	5 5 4 6 3 5	179 1791 1793 1794 1795 1796 1799

Table 3. Detailed Statistics for Establishments With Payroll by Industry Group: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Total	Building construction—general contractors and operative builders	Heavy construction other than building construction—contractors	Special trade contractors	Relative standard error of estimate (percent) for column—			
	A	B	C	D	A	B	C	D
Number of establishments in business during year	572 851	168 407	37 180	367 263	(Z)	(Z)	1	(Z)
Proprietors and working partners	251 041	71 049	11 497	168 495	(Z)	1	2	(Z)
All employees**	4 668 280	1 096 859	799 422	2 771 999	(Z)	(Z)	(Z)	(Z)
Construction workers:								
March	3 279 642	711 314	544 017	2 024 312	(Z)	(Z)	(Z)	(Z)
May	3 650 182	764 536	675 122	2 210 524	(Z)	(Z)	(Z)	(Z)
August	3 872 139	814 603	713 074	2 344 462	(Z)	(Z)	(Z)	(Z)
November	3 582 836	745 774	657 409	2 179 653	(Z)	(Z)	(Z)	(Z)
Average	3 596 200	759 057	647 406	2 189 738	(Z)	(Z)	(Z)	(Z)
Other employees:								
March	1 075 709	342 832	152 174	580 703	(Z)	(Z)	(Z)	(Z)
May	1 065 118	336 714	151 631	576 773	(Z)	(Z)	(Z)	(Z)
August	1 073 431	337 872	152 796	582 764	(Z)	(Z)	(Z)	(Z)
November	1 074 063	333 793	151 465	588 805	(Z)	(Z)	(Z)	(Z)
Average	1 072 080	337 803	152 016	582 261	(Z)	(Z)	(Z)	(Z)
Payroll, all employees	117 729 651	27 077 574	23 728 285	66 923 793	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	83 048 158	16 124 696	17 621 730	49 301 733	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	34 681 493	10 952 878	6 106 555	17 622 060	(Z)	(Z)	(Z)	(Z)
First-quarter payroll, all employees	25 769 714	6 122 806	4 699 442	14 947 466	(Z)	(Z)	(Z)	(Z)
Fringe benefits, all employees	29 397 159	5 986 636	6 404 012	17 006 510	(Z)	(Z)	(Z)	(Z)
Legally required expenditures	19 095 920	4 129 972	4 043 186	10 922 761	(Z)	(Z)	(Z)	(Z)
Voluntary expenditures	10 301 239	1 856 664	2 360 826	6 083 749	(Z)	(Z)	(Z)	(Z)
Dollar value of business done	539 084 657	220 231 215	98 528 182	220 325 260	(Z)	(Z)	(Z)	(Z)
Value of construction work	528 105 847	215 628 967	95 571 457	216 905 423	(Z)	(Z)	(Z)	(Z)
Value of construction work subcontracted in from others	142 608 034	6 819 329	16 995 592	118 793 113	(Z)	1	1	(Z)
Other business receipts	10 978 810	4 602 248	2 956 725	3 419 836	1	1	1	1
Net value of construction work†	391 189 891	114 722 152	77 526 108	198 941 631	(Z)	(Z)	(Z)	(Z)
Value added††	234 617 817	63 116 790	49 165 312	122 335 715	(Z)	(Z)	(Z)	(Z)
Selected costs	304 466 840	157 114 425	49 362 870	97 989 545	(Z)	(Z)	(Z)	(Z)
Materials, components, and supplies	158 859 963	54 196 121	28 626 436	76 037 406	(Z)	(Z)	(Z)	(Z)
Construction work subcontracted out to others	136 915 956	100 906 815	18 045 349	17 963 792	(Z)	(Z)	(Z)	1
Selected power, fuels, and lubricants	8 690 921	2 011 489	2 691 085	3 988 347	(Z)	1	(Z)	(Z)
Electricity	1 469 035	585 499	262 815	620 720	(Z)	1	1	1
Natural and manufactured gas	464 155	158 839	140 388	164 929	(Z)	1	(Z)	1
Gasoline and diesel fuel	6 240 812	1 176 921	2 055 128	3 008 763	(Z)	1	(Z)	(Z)
On highway use	4 479 896	1 017 708	932 779	2 529 409	(Z)	1	(Z)	(Z)
Off highway use	1 760 915	159 212	1 122 348	479 354	(Z)	2	(Z)	1
Other, including lubricating oils and greases	516 919	90 231	232 754	193 934	1	2	1	1
Rental cost for machinery, equipment, and buildings	8 364 021	1 658 797	3 044 412	3 660 812	(Z)	1	1	1
For machinery and equipment	5 617 243	966 834	2 693 654	1 956 755	(Z)	1	1	1
For buildings	2 746 777	691 962	350 758	1 704 057	(Z)	1	1	1
Selected purchased services	9 050 015	1 924 318	2 994 920	4 130 777	(Z)	1	1	(Z)
Communication services	2 741 739	791 872	374 024	1 575 843	1	1	1	1
Repairs to buildings and other structures	496 632	160 891	99 652	236 089	1	3	2	1
Repairs to machinery and equipment	5 811 644	971 555	2 521 244	2 318 845	(Z)	1	1	1
Ownership of construction projects:								
Value of construction work	528 105 847	215 628 967	95 571 457	216 905 423	(Z)	(Z)	(Z)	(Z)
Government owned	133 767 207	38 243 577	54 091 977	41 431 653	(Z)	1	(Z)	1
Federal	30 243 555	10 234 786	9 270 607	10 738 162	1	1	1	1
State and local	103 523 652	28 008 791	44 821 370	30 693 491	(Z)	1	1	1
Privately owned	394 338 640	177 385 390	41 479 479	175 473 770	(Z)	(Z)	1	(Z)

Table 4. Detailed Statistics for Establishments With Payroll by Industry Group: 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Total	Building construction—general contractors and operative builders	Heavy construction other than building construction—contractors	Special trade contractors	Relative standard error of estimate (percent) for column—			
	A	B	C	D	A	B	C	D
Number of establishments in business during year	536 276	157 639	36 597	342 040	(Z)	(Z)	1	(Z)
Proprietors and working partners	138 701	34 971	7 110	96 620	(Z)	1	3	(Z)
All employees**	5 014 598	1 278 422	827 126	2 909 050	(Z)	(Z)	(Z)	(Z)
Construction workers:								
March	3 641 188	866 593	572 514	2 202 081	(Z)	(Z)	(Z)	(Z)
May	4 013 101	925 726	705 876	2 381 499	(Z)	(Z)	(Z)	(Z)
August	4 272 270	990 623	752 713	2 528 934	(Z)	(Z)	(Z)	(Z)
November	3 990 976	919 925	702 123	2 368 928	(Z)	(Z)	(Z)	(Z)
Average	3 979 385	925 717	683 307	2 370 361	(Z)	(Z)	(Z)	(Z)
Other employees:								
March	1 020 820	346 752	142 258	531 810	(Z)	(Z)	(Z)	(Z)
May	1 029 151	352 217	143 452	533 482	(Z)	(Z)	(Z)	(Z)
August	1 049 248	359 265	145 612	544 371	(Z)	(Z)	(Z)	(Z)
November	1 042 012	352 605	144 013	545 394	(Z)	(Z)	(Z)	(Z)
Average	1 035 308	352 710	143 834	538 764	(Z)	(Z)	(Z)	(Z)
Payroll, all employees	110 199 890	27 870 467	20 408 161	61 921 262	(Z)	(Z)	(Z)	(Z)
Payroll, construction workers	79 588 691	17 204 455	15 461 273	46 922 963	(Z)	(Z)	(Z)	(Z)
Payroll, other employees	30 611 196	10 666 011	4 946 887	14 998 298	(Z)	(Z)	(Z)	(Z)
First-quarter payroll, all employees	24 166 639	6 327 481	4 083 699	13 755 459	(Z)	(Z)	(Z)	(Z)
Fringe benefits, all employees	24 793 259	5 838 972	4 919 667	14 034 620	(Z)	(Z)	(Z)	(Z)
Legally required expenditures	16 908 658	4 080 599	3 238 955	9 589 104	(Z)	(Z)	(Z)	(Z)
Voluntary expenditures	7 884 599	1 758 372	1 680 712	4 445 515	(Z)	(Z)	(Z)	(Z)
Dollar value of business done.....	514 937 596	225 188 140	85 672 568	204 076 888	(Z)	(Z)	(Z)	(Z)
Value of construction work	495 346 312	212 628 500	82 285 352	200 432 460	(Z)	(Z)	(Z)	(Z)
Value of construction work subcontracted in from others	118 720 566	8 470 170	14 524 273	95 726 123	(Z)	2	1	(Z)
Other business receipts	19 591 285	12 559 641	3 387 216	3 644 428	1	1	(Z)	1
Net value of construction work†.....	365 240 579	111 019 219	68 435 258	185 786 102	(Z)	(Z)	(Z)	(Z)
Value added††	227 934 191	65 514 147	44 940 458	117 479 586	(Z)	(Z)	(Z)	(Z)
Selected costs	279 977 099	152 647 687	40 732 110	86 597 302	(Z)	(Z)	(Z)	(Z)
Materials, components, and supplies	142 232 703	49 315 553	24 517 891	68 399 259	(Z)	(Z)	(Z)	(Z)
Construction work subcontracted out to others	130 105 731	101 609 281	13 850 093	14 646 357	(Z)	(Z)	(Z)	1
Selected power, fuels, and lubricants	7 638 661	1 722 852	2 364 124	3 551 685	(Z)	(Z)	(Z)	(Z)
Electricity	1 089 309	405 976	214 108	469 225	(Z)	1	1	(Z)
Natural and manufactured gas	303 467	94 083	91 924	117 460	(Z)	1	1	1
Gasoline and diesel fuel	5 726 657	1 119 785	1 864 686	2 742 186	(Z)	1	(Z)	(Z)
On highway use	4 125 204	973 662	853 122	2 298 420	(Z)	(Z)	(Z)	(Z)
Off highway use	1 601 450	146 122	1 011 563	443 765	(Z)	2	(Z)	1
Other, including lubricating oils and greases	519 226	103 007	193 405	222 814	(Z)	1	1	1
Rental cost for machinery, equipment, and buildings	7 717 643	1 606 240	2 847 296	3 264 107	(Z)	1	1	(Z)
For machinery and equipment	5 441 521	951 880	2 582 690	1 906 951	(Z)	1	1	1
For buildings	2 276 121	654 360	264 605	1 357 156	(Z)	1	1	1
Selected purchased services	7 539 794	1 468 806	2 856 478	3 214 510	(Z)	1	(Z)	(Z)
Communication services.....	2 050 017	621 785	270 096	1 158 136	(Z)	1	1	(Z)
Repairs to buildings and other structures.....	436 677	145 695	77 564	213 418	1	1	2	1
Repairs to machinery and equipment	5 053 097	701 325	2 508 817	1 842 955	(Z)	1	(Z)	1
Ownership of construction projects:								
Value of construction work	495 346 312	212 628 500	82 285 352	200 432 460	(Z)	(Z)	(Z)	(Z)
Government owned	98 300 967	25 813 348	44 273 418	28 214 201	(Z)	1	(Z)	1
Federal	26 434 306	8 113 150	9 701 517	8 619 639	1	1	1	1
State and local	71 866 661	17 700 198	34 571 901	19 594 562	(Z)	1	(Z)	1
Privately owned	397 045 344	186 815 151	38 011 934	172 218 259	(Z)	(Z)	(Z)	(Z)

Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll by Industry Group: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Total	Building construction—general contractors and operative builders	Heavy construction other than building construction—contractors	Special trade contractors	Relative standard error of estimate (percent) for column—			
	A	B	C	D	A	B	C	D
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT								
Beginning-of-year gross book value of depreciable assets	72 145 630	12 826 704	30 753 316	28 565 611	(Z)	1	(Z)	(Z)
Capital expenditures, other than land	7 902 110	1 442 664	3 085 883	3 373 563	1	1	1	1
New	5 906 727	1 142 292	2 209 345	2 555 090	1	2	1	1
Used	1 995 383	300 373	876 538	818 473	1	2	2	2
Retirements and disposition of depreciable assets	3 948 695	885 098	1 716 605	1 346 993	1	3	1	2
End-of-year gross book value of depreciable assets	76 099 045	13 384 270	32 122 594	30 592 181	(Z)	1	(Z)	(Z)
Depreciation charges during year	7 959 106	1 445 971	3 095 291	3 417 844	(Z)	1	1	1
Buildings and Other Structures, Additions, and Related Facilities								
Beginning-of-year gross book value of depreciable assets	11 194 295	3 809 993	2 896 580	4 487 722	1	2	1	1
Capital expenditures, other than land	784 990	256 800	164 365	363 824	2	4	3	3
New buildings and other structures	602 408	215 529	131 768	255 112	2	4	3	3
Used buildings and other structures	182 581	41 272	32 597	108 713	3	7	7	5
Retirements and disposition of depreciable assets	530 346	354 888	50 466	124 992	3	4	7	4
End-of-year gross book value of depreciable assets	11 448 939	3 711 906	3 010 479	4 726 554	1	2	1	1
Depreciation charges during year	828 553	286 171	174 604	367 779	1	3	2	1
Machinery and Equipment								
Beginning-of-year gross book value of depreciable assets	60 951 335	9 016 710	27 856 736	24 077 889	(Z)	1	(Z)	1
Capital expenditures, other than land	7 117 120	1 185 864	2 921 518	3 009 738	1	1	1	1
New machinery and equipment, including automobiles and trucks	5 304 318	926 763	2 077 577	2 299 978	1	1	1	1
New automobiles and trucks, intended primarily for highway use	1 974 643	405 558	517 065	1 052 020	1	2	1	1
Used machinery and equipment, including automobiles and trucks	1 812 802	259 101	843 941	709 760	1	3	2	2
Retirements and disposition of depreciable assets	3 418 349	530 210	1 666 139	1 222 000	1	4	1	2
End-of-year gross book value of depreciable assets	64 650 106	9 672 364	29 112 115	25 865 627	(Z)	1	(Z)	1
Depreciation charges during year	7 130 553	1 159 800	2 920 687	3 050 065	(Z)	1	1	1

Table 6. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll by Industry Group: 1987

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Total	Building construction—general contractors and operative builders	Heavy construction other than building construction—contractors	Special trade contractors	Relative standard error of estimate (percent) for column—			
	A	B	C	D	A	B	C	D
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT								
Beginning-of-year gross book value of depreciable assets	56 583 766	13 370 117	21 870 669	21 342 980	(Z)	1	1	1
Capital expenditures, other than land	8 281 784	1 915 467	2 873 734	3 492 583	(Z)	1	1	1
New	6 453 092	1 537 901	2 199 684	2 715 507	1	1	1	1
Used	1 828 692	377 566	674 050	777 076	1	2	2	1
Retirements and disposition of depreciable assets	3 418 263	868 704	1 560 784	988 775	1	2	2	2
End-of-year gross book value of depreciable assets	61 447 288	14 416 880	23 183 620	23 846 788	(Z)	1	1	1
Depreciation charges during year	7 358 890	1 690 134	2 551 140	3 117 616	(Z)	1	1	1
Buildings and Other Structures, Additions, and Related Facilities								
Beginning-of-year gross book value of depreciable assets	11 759 037	5 138 269	1 955 533	4 665 235	1	2	1	1
Capital expenditures, other than land	1 262 842	569 075	237 847	455 920	1	2	2	2
New buildings and other structures	930 262	446 093	189 283	294 886	2	3	2	2
Used buildings and other structures	332 578	122 982	48 563	161 033	2	4	6	3
Retirements and disposition of depreciable assets	614 777	369 730	111 534	133 513	4	5	2	4
End-of-year gross book value of depreciable assets	12 407 102	5 337 615	2 081 845	4 987 642	1	2	1	1
Depreciation charges during year	1 047 943	445 161	171 554	431 228	1	2	1	1
Machinery and Equipment								
Beginning-of-year gross book value of depreciable assets	44 824 727	8 231 847	19 915 136	16 677 744	(Z)	1	1	1
Capital expenditures, other than land	7 018 941	1 346 391	2 635 887	3 036 663	(Z)	1	1	1
New machinery and equipment, including automobiles and trucks	5 522 827	1 091 807	2 010 400	2 420 620	1	1	1	1
New automobiles and trucks, intended primarily for highway use	2 558 831	578 343	575 524	1 404 964	1	1	1	1
Used machinery and equipment, including automobiles and trucks	1 496 111	254 583	625 486	616 042	1	2	1	1
Retirements and disposition of depreciable assets	2 803 484	498 974	1 449 249	855 261	1	1	2	2
End-of-year gross book value of depreciable assets	49 040 183	9 079 264	21 101 774	18 859 145	(Z)	1	1	1
Depreciation charges during year	6 310 946	1 244 973	2 379 586	2 686 387	(Z)	1	1	1

Table 7. Value of Inventories for Establishments With Payroll by Industry Group: 1992 and 1991

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Total	Building construction—general contractors and operative builders	Heavy construction other than building construction—contractors	Special trade contractors	Relative standard error of estimate (percent) for column—			
	A	B	C	D	A	B	C	D
All establishments:								
Number	572 851	168 407	37 180	367 263	(Z)	(Z)	1	(Z)
Value of construction work	528 105 847	215 628 967	95 571 457	216 905 423	(Z)	(Z)	(Z)	(Z)
Establishments with inventories:								
Number	174 658	37 531	9 309	127 818	(Z)	1	1	(Z)
Value of construction work	214 442 835	55 890 156	39 742 335	118 810 343	(Z)	(Z)	(Z)	(Z)
Inventories ¹ :								
End of 1992, materials and supplies	7 186 087	2 656 977	703 903	3 825 207	1	3	1	1
End of 1991, materials and supplies	6 555 443	2 214 801	713 673	3 626 969	1	3	1	1
Establishments with no inventories:								
Number	204 929	72 197	15 055	117 678	(Z)	1	1	(Z)
Value of construction work	204 630 721	106 912 927	40 655 184	57 062 611	(Z)	(Z)	(Z)	(Z)
Establishments not reporting:								
Number	193 264	58 680	12 817	121 767	(Z)	1	1	(Z)
Value of construction work	109 032 291	52 825 884	15 173 938	41 032 469	(Z)	(Z)	1	(Z)

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 8. Selected Statistics for Establishments With Payroll by Industry Group and Employment Size Class: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
CONSTRUCTION INDUSTRIES										
Number of establishments -----	572 851	358 645	110 704	58 712	32 047	8 351	3 438	699	191	65
All employees** -----	4 668 280	675 891	706 582	773 139	944 903	565 746	500 345	234 165	128 169	139 341
Payroll, all employees -----	117 729 651	11 248 729	14 336 293	18 394 177	25 703 413	16 765 000	15 386 631	7 557 666	3 851 927	4 485 815
Dollar value of business done -----	539 084 657	71 037 464	65 424 512	78 548 805	110 769 948	74 418 934	71 186 421	34 249 700	18 074 607	15 374 265
Value of construction work -----	528 105 847	70 051 576	64 267 436	77 166 580	108 727 957	72 866 138	69 472 149	33 385 236	17 505 307	14 663 468
Net value of construction work† -----	391 189 891	55 312 453	51 005 349	60 298 622	80 759 203	52 066 587	46 856 641	22 636 348	11 748 707	10 505 981
Value added†† -----	234 617 817	30 489 519	29 568 883	35 842 182	48 391 321	31 932 535	28 766 758	14 217 400	7 651 504	7 757 716
Cost of materials, components, supplies, and fuels -----	167 550 884	25 808 823	22 593 542	25 838 666	34 409 873	21 686 848	19 804 155	9 283 412	4 666 503	3 459 062
Cost of construction work subcontracted out to others -----	136 915 956	14 739 123	13 262 087	16 867 958	27 968 754	20 799 551	22 615 508	10 748 889	5 756 600	4 157 487
Rental cost for machinery, equipment, and buildings -----	8 364 021	833 694	955 475	1 243 586	1 755 670	1 195 396	1 204 467	667 715	284 906	223 112
Capital expenditures, other than land -----	7 902 110	1 124 552	1 031 751	1 243 050	1 546 008	1 048 839	1 027 267	524 965	177 649	178 029
End-of-year gross book value of depreciable assets -----	76 099 045	9 311 582	9 352 108	11 357 807	15 430 496	10 275 212	10 824 124	4 684 009	1 964 201	2 899 505
Relative standard error of estimate (percent)										
All employees** -----	(Z)	(Z)	1	1	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Net value of construction work -----	(Z)	1	1	1	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Capital expenditures, other than land -----	1	2	2	2	1	(Z)	(Z)	(Z)	(Z)	(Z)
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS										
Number of establishments -----	168 407	116 096	29 656	13 412	6 668	1 680	692	138	49	17
All employees** -----	1 096 859	216 754	187 600	176 127	195 434	114 012	101 673	47 452	32 489	25 317
Payroll, all employees -----	27 077 574	3 730 970	3 901 844	4 237 194	5 458 881	3 453 679	3 088 071	1 509 970	954 411	742 554
Dollar value of business done -----	220 231 215	36 140 445	28 717 313	30 469 685	42 725 452	28 827 194	27 703 001	12 725 582	7 950 562	4 971 982
Value of construction work -----	215 628 967	35 544 529	28 144 478	29 889 844	41 965 840	28 127 306	27 015 291	12 309 936	7 710 108	4 921 635
Net value of construction work† -----	114 722 152	23 645 958	17 659 396	17 122 716	21 173 805	13 030 291	10 922 793	5 284 645	3 381 741	2 500 807
Value added†† -----	63 116 790	11 896 542	9 388 539	9 521 278	12 039 297	7 704 847	6 174 818	2 948 563	1 861 953	1 580 953
Cost of materials, components, supplies, and fuels -----	56 207 610	12 345 332	8 843 693	8 181 279	9 894 120	6 025 332	5 435 684	2 751 728	1 760 242	970 201
Cost of construction work subcontracted out to others -----	100 906 815	11 898 571	10 485 082	12 767 128	20 792 036	15 097 015	16 092 498	7 025 291	4 328 367	2 420 828
Rental cost for machinery, equipment, and buildings -----	1 658 797	249 242	237 996	259 830	299 537	200 640	205 812	98 195	53 732	53 813
Capital expenditures, other than land -----	1 442 664	344 859	243 295	218 415	226 773	145 079	157 435	65 969	22 907	17 933
End-of-year gross book value of depreciable assets -----	13 384 270	2 690 092	2 196 289	2 119 692	2 281 668	1 439 459	1 551 567	595 205	247 009	263 289
Relative standard error of estimate (percent)										
All employees** -----	(Z)	1	1	1	1	1	1	(Z)	(Z)	(Z)
Net value of construction work -----	(Z)	1	1	1	1	(Z)	(Z)	(Z)	(Z)	(Z)
Capital expenditures, other than land -----	1	3	5	4	1	(Z)	(Z)	(Z)	(Z)	(Z)
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS										
Number of establishments -----	37 180	15 724	7 598	5 946	4 853	1 764	947	244	65	39
All employees** -----	799 422	31 285	49 419	79 063	147 675	121 161	142 394	81 723	44 236	102 467
Payroll, all employees -----	23 728 285	559 602	1 067 521	2 025 095	4 210 026	3 633 762	4 557 593	2 777 988	1 484 713	3 411 984
Dollar value of business done -----	98 528 182	3 092 571	4 654 488	8 763 948	18 122 446	16 288 671	20 376 682	11 947 246	5 735 949	9 546 181
Value of construction work -----	95 571 457	3 052 406	4 577 110	8 610 426	17 683 371	15 901 106	19 707 070	11 669 425	5 470 314	8 900 228
Net value of construction work† -----	77 526 108	2 722 186	4 046 510	7 391 592	14 581 425	12 798 652	15 447 587	8 784 189	4 464 262	7 289 706
Value added†† -----	49 165 312	1 727 225	2 541 944	4 554 882	8 717 081	7 695 126	9 577 005	5 718 237	2 932 048	5 701 765
Cost of materials, components, supplies, and fuels -----	31 317 521	1 035 127	1 581 943	2 990 232	6 303 418	5 491 091	6 540 194	3 343 773	1 797 849	2 233 894
Cost of construction work subcontracted out to others -----	18 045 349	330 220	530 600	1 218 834	3 101 947	3 102 455	4 259 483	2 885 236	1 006 052	1 610 522
Rental cost for machinery, equipment, and buildings -----	3 044 412	99 251	170 695	283 786	596 613	515 034	655 880	429 486	143 893	149 773
Capital expenditures, other than land -----	3 085 883	159 571	197 621	342 426	595 406	545 139	643 619	353 048	117 974	131 079
End-of-year gross book value of depreciable assets -----	32 122 594	1 424 914	2 039 250	3 235 284	6 151 649	5 229 081	6 904 047	3 258 091	1 417 534	2 462 744
Relative standard error of estimate (percent)										
All employees** -----	(Z)	2	2	2	1	(Z)	(Z)	(Z)	(Z)	(Z)
Net value of construction work -----	(Z)	3	2	2	1	(Z)	(Z)	(Z)	(Z)	(Z)
Capital expenditures, other than land -----	1	6	6	4	1	(Z)	(Z)	(Z)	(Z)	(Z)

Table 8. Selected Statistics for Establishments With Payroll by Industry Group and Employment Size Class: 1992—Con.

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
SPECIAL TRADE CONTRACTORS										
Number of establishments -----	367 263	226 825	73 450	39 354	20 526	4 907	1 799	317	77	9
All employees** -----	2 771 999	427 852	469 563	517 948	601 794	330 573	256 277	104 990	51 444	11 558
Payroll, all employees -----	66 923 793	6 958 157	9 366 929	12 131 889	16 034 506	9 677 558	7 740 966	3 269 708	1 412 803	331 277
Dollar value of business done -----	220 325 260	31 804 448	32 052 711	39 315 173	49 922 050	29 303 069	23 106 738	9 576 872	4 388 096	856 102
Value of construction work -----	216 905 423	31 454 641	31 545 849	38 666 309	49 078 745	28 837 726	22 749 788	9 405 875	4 324 885	841 605
Net value of construction work† -----	198 941 631	28 944 309	29 299 444	35 784 313	45 003 974	26 237 645	20 486 261	8 567 514	3 902 704	715 468
Value added†† -----	122 335 715	16 865 752	17 638 400	21 766 022	27 634 943	16 532 563	13 014 934	5 550 600	2 857 503	474 998
Cost of materials, components, supplies, and fuels -----	80 025 752	12 428 364	12 167 906	14 667 155	18 212 336	10 170 425	7 828 277	3 187 911	1 108 412	254 967
Cost of construction work subcontracted out to others -----	17 963 792	2 510 332	2 246 405	2 881 996	4 074 771	2 600 081	2 263 527	838 362	422 181	126 137
Rental cost for machinery, equipment, and buildings -----	3 660 812	485 201	546 784	699 969	859 520	479 722	342 775	140 034	87 281	19 526
Capital expenditures, other than land -----	3 373 563	620 123	590 835	682 209	723 829	358 621	226 213	105 948	36 768	29 017
End-of-year gross book value of depreciable assets -----	30 592 181	5 196 576	5 116 569	6 002 831	6 997 179	3 606 672	2 368 510	830 713	299 658	173 472
Relative standard error of estimate (percent)										
All employees** -----	(Z)	1	1	1	(Z)	(Z)	(Z)	1	(Z)	(Z)
Net value of construction work -----	(Z)	1	1	1	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Capital expenditures, other than land -----	1	2	3	3	1	(Z)	(Z)	(Z)	(Z)	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 9. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll by Industry Group: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
CONSTRUCTION INDUSTRIES											
Number of establishments -----	572 851	(S)	(S)	80 373	155 489	100 447	69 472	53 286	19 516	9 779	7 363
All employees** -----	4 668 280	(S)	(S)	131 881	443 950	506 870	588 368	810 356	562 967	480 439	1 069 009
Payroll, all employees -----	117 729 651	(S)	(S)	1 511 454	6 457 808	9 176 783	12 384 318	20 173 160	15 744 373	14 867 406	36 774 816
Dollar value of business done -----	539 084 657	(S)	(S)	5 884 097	25 291 274	35 268 284	48 463 582	81 266 534	67 404 403	67 022 344	206 398 207
Value of construction work -----	528 105 847	(S)	(S)	5 824 803	25 001 181	34 780 828	47 637 147	79 680 491	66 127 683	65 823 667	201 161 345
Net value of construction work† -----	391 189 891	(S)	(S)	5 389 955	22 667 495	30 727 723	40 508 376	64 944 324	51 685 205	48 781 304	124 563 876
Value added†† -----	234 617 817	(S)	(S)	3 299 618	13 572 856	17 979 943	23 883 860	38 193 666	30 689 413	28 980 017	76 837 550
Cost of materials, components, supplies, and fuels -----	167 550 884	(S)	(S)	2 149 631	9 384 732	13 235 236	17 450 951	28 336 700	22 272 512	20 999 964	52 963 188
Cost of construction work subcontracted out to others -----	136 915 956	(S)	(S)	(S)	2 333 686	4 053 106	7 128 771	14 736 168	14 442 478	17 042 363	76 597 469
Rental cost for machinery, equipment, and buildings -----	8 364 021	(S)	(S)	84 804	383 337	582 425	810 961	1 323 784	1 061 461	1 082 728	3 007 872
Capital expenditures, other than land -----	7 902 110	(S)	(S)	124 650	540 740	716 142	865 886	1 311 973	975 421	954 544	2 375 334
End-of-year gross book value of depreciable assets -----	76 099 045	(S)	(S)	1 079 237	4 420 466	6 006 733	7 849 174	12 407 220	9 619 976	9 201 008	25 131 986
Relative standard error of estimate (percent)											
All employees** -----	(Z)	(S)	(S)	1	1	1	1	(Z)	(Z)	(Z)	(Z)
Net value of construction work -----	(Z)	(S)	(S)	1	1	1	1	1	1	(Z)	(Z)
Capital expenditures, other than land -----	1	(S)	(S)	3	2	2	2	2	1	1	(Z)
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS											
Number of establishments -----	168 407	(S)	(S)	19 869	42 079	30 360	22 977	18 746	7 066	3 789	3 349
All employees** -----	1 096 859	(S)	(S)	29 375	103 510	117 006	132 650	168 848	116 722	106 036	303 980
Payroll, all employees -----	27 077 574	(S)	(S)	327 042	1 390 181	1 935 807	2 598 654	4 001 364	3 121 648	3 166 567	10 375 763
Dollar value of business done -----	220 231 215	(S)	(S)	1 450 686	6 978 916	10 600 313	16 084 235	28 686 776	24 257 294	26 005 255	105 661 180
Value of construction work -----	215 628 967	(S)	(S)	1 429 852	6 881 401	10 429 191	15 797 169	28 057 447	23 779 288	25 522 207	103 230 519
Net value of construction work† -----	114 722 152	(S)	(S)	1 188 145	5 443 777	7 727 207	10 701 564	17 505 301	13 801 534	13 556 588	44 379 457
Value added†† -----	63 116 790	(S)	(S)	660 379	2 966 766	4 036 012	5 699 736	9 128 943	7 484 937	7 428 659	25 484 422
Cost of materials, components, supplies, and fuels -----	56 207 610	(S)	(S)	548 600	2 574 526	3 862 317	5 288 893	9 005 688	6 794 601	6 610 977	21 325 696
Cost of construction work subcontracted out to others -----	100 906 815	(S)	(S)	(S)	1 437 624	2 701 984	5 095 606	10 552 145	9 977 755	11 965 619	58 851 062
Rental cost for machinery, equipment, and buildings -----	1 658 797	(S)	(S)	17 359	75 215	119 725	163 987	237 739	181 419	185 284	670 869
Capital expenditures, other than land -----	1 442 664	(S)	(S)	24 993	111 787	139 013	163 014	230 122	168 165	152 645	444 347
End-of-year gross book value of depreciable assets -----	13 384 270	(S)	(S)	198 173	800 562	1 100 137	1 452 935	2 165 422	1 626 678	1 436 522	4 527 216
Relative standard error of estimate (percent)											
All employees** -----	(Z)	(S)	(S)	2	1	2	2	1	1	1	(Z)
Net value of construction work -----	(Z)	(S)	(S)	2	1	1	1	1	2	2	(Z)
Capital expenditures, other than land -----	1	(S)	(S)	6	4	4	5	4	5	5	1
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS											
Number of establishments -----	37 180	(S)	(S)	3 242	7 078	6 299	5 134	5 651	2 920	1 903	1 904
All employees** -----	799 422	(S)	(S)	5 252	20 821	33 726	47 566	94 814	92 646	103 897	397 772
Payroll, all employees -----	23 728 285	(S)	(S)	58 345	298 567	614 225	991 662	2 384 975	2 553 509	3 122 678	13 679 676
Dollar value of business done -----	98 528 182	(S)	(S)	238 141	1 183 140	2 259 805	3 637 836	8 834 980	10 356 805	13 359 385	58 578 174
Value of construction work -----	95 571 457	(S)	(S)	234 739	1 157 076	2 216 042	3 577 494	8 666 092	10 123 645	13 071 947	56 445 513
Net value of construction work† -----	77 526 108	(S)	(S)	223 727	1 095 313	2 047 803	3 270 824	7 672 718	8 594 482	10 774 176	43 771 464
Value added†† -----	49 165 312	(S)	(S)	147 753	717 035	1 365 771	2 123 800	4 906 273	5 276 661	6 385 819	28 191 959
Cost of materials, components, supplies, and fuels -----	31 317 521	(S)	(S)	(S)	404 341	725 796	1 207 366	2 935 332	3 550 982	4 675 794	17 712 166
Cost of construction work subcontracted out to others -----	18 045 349	(S)	(S)	(S)	61 764	168 238	306 671	993 374	1 529 162	2 297 771	12 674 049
Rental cost for machinery, equipment, and buildings -----	3 044 412	(S)	(S)	(S)	39 417	78 855	131 903	305 535	347 518	452 426	1 678 808
Capital expenditures, other than land -----	3 085 883	(S)	(S)	(S)	69 480	137 818	160 614	364 308	365 900	468 131	1 503 479
End-of-year gross book value of depreciable assets -----	32 122 594	(S)	(S)	(S)	656 543	1 165 702	1 707 010	3 621 545	3 752 236	4 482 948	16 552 583
Relative standard error of estimate (percent)											
All employees** -----	(Z)	(S)	(S)	5	3	3	2	1	1	(Z)	(Z)
Net value of construction work -----	(Z)	(S)	(S)	4	3	3	2	2	1	1	(Z)
Capital expenditures, other than land -----	1	(S)	(S)	(S)	8	7	6	4	2	1	(Z)

Table 9. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll by Industry Group: 1992—Con.

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
SPECIAL TRADE CONTRACTORS											
Number of establishments -----	367 263	(S)	(S)	57 262	106 331	63 788	41 362	28 889	9 531	4 087	2 111
All employees** -----	2 771 999	(S)	(S)	97 254	319 618	356 137	408 152	546 694	353 599	270 507	367 257
Payroll, all employees -----	66 923 793	(S)	(S)	1 126 067	4 769 060	6 626 751	8 794 002	13 786 820	10 069 217	8 578 162	12 719 376
Dollar value of business done -----	220 325 260	(S)	(S)	4 195 269	17 129 218	22 408 166	28 741 511	43 744 777	32 790 304	27 657 705	42 158 853
Value of construction work -----	216 905 423	(S)	(S)	4 160 212	16 962 703	22 135 596	28 262 484	42 956 952	32 224 750	27 229 513	41 485 312
Net value of construction work† -----	198 941 631	(S)	(S)	3 978 082	16 128 405	20 952 713	26 535 989	39 766 304	29 289 189	24 450 541	36 412 955
Value added†† -----	122 335 715	(S)	(S)	2 491 486	9 889 055	12 578 160	16 060 324	24 158 449	17 927 815	15 165 539	23 161 169
Cost of materials, components, supplies, and fuels -----	80 025 752	(S)	(S)	1 521 654	6 405 866	8 647 123	10 954 692	16 395 680	11 926 928	9 713 193	13 925 327
Cost of construction work subcontracted out to others -----	17 963 792	(S)	(S)	(S)	834 298	1 182 883	1 726 494	3 190 648	2 935 560	2 778 973	5 072 358
Rental cost for machinery, equipment, and buildings -----	3 660 812	(S)	(S)	59 577	268 705	383 844	515 072	780 510	532 524	445 018	658 195
Capital expenditures, other than land -----	3 373 563	(S)	(S)	87 357	359 472	439 310	542 258	717 543	441 356	333 768	427 507
End-of-year gross book value of depreciable assets -----	30 592 181	(S)	(S)	739 928	2 963 361	3 740 895	4 689 229	6 620 252	4 241 063	3 281 538	4 052 186
Relative standard error of estimate (percent)											
All employees** -----	(Z)	(S)	(S)	1	1	1	1	1	(Z)	(Z)	(Z)
Net value of construction work -----	(Z)	(S)	(S)	1	1	1	1	1	(Z)	(Z)	(Z)
Capital expenditures, other than land -----	1	(S)	(S)	4	3	3	3	2	1	(Z)	(Z)

Table 10. **Value of Construction Work for Establishments With Payroll by Industry Group and Type of Construction: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry and type of construction	1992 value of construction work				1987 value of construction work	Relative standard error of estimate (percent) for column—				
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair		A	B	C	D	E
	A	B	C	D						
CONSTRUCTION INDUSTRIES										
Value of construction work	528 105 847	319 107 740	126 231 473	66 657 563	495 346 312	(Z)	(Z)	(Z)	(Z)	(Z)
Building construction	390 814 089	247 028 470	100 050 141	43 735 479	368 002 219	(Z)	(Z)	(Z)	(Z)	(Z)
Single-family houses	142 006 481	104 912 221	23 947 504	13 146 755	122 202 213	(Z)	1	1	1	(Z)
Single-family houses, detached	126 304 885	93 336 579	21 627 966	11 340 339	101 275 330	(Z)	1	1	1	(Z)
Single-family houses, attached, including townhouses and townhouse-type condominiums	15 701 596	11 575 642	2 319 538	1 806 416	20 926 883	1	1	2	2	1
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	15 533 543	8 743 197	3 929 506	2 860 839	22 056 956	1	1	2	1	(Z)
Other residential buildings, including hotels, motels, and tourist cabins	6 835 472	4 191 106	1 831 386	812 980	14 302 766	1	1	2	2	(Z)
Hotels, motels, and tourist cabins	4 855 341	3 070 924	1 201 486	582 932	8 886 196	1	1	2	2	(Z)
Other residential buildings	1 980 131	1 120 182	629 900	230 048	5 416 570	2	2	4	6	1
Office buildings	46 050 567	23 560 786	16 872 139	5 617 642	60 570 245	(Z)	(Z)	1	1	(Z)
Other commercial buildings such as stores, restaurants, and automobile service stations	47 762 061	28 172 996	13 341 287	6 247 778	46 268 031	(Z)	1	1	1	(Z)
Industrial buildings and warehouses	56 912 496	31 574 276	16 099 655	9 238 565	52 477 389	(Z)	(Z)	(Z)	1	(Z)
Industrial buildings	47 116 273	25 132 138	13 850 272	8 133 863	41 468 980	(Z)	(Z)	(Z)	1	(Z)
Warehouses	9 796 224	6 442 138	2 249 383	1 104 702	11 008 408	1	1	1	1	(Z)
Religious buildings	5 675 169	3 099 254	1 842 376	733 539	4 535 374	1	1	2	1	1
Educational buildings	27 595 656	16 512 324	9 089 429	1 993 904	16 282 332	1	1	1	1	(Z)
Hospitals and institutional buildings	28 980 784	17 176 761	9 903 696	1 900 327	19 304 912	(Z)	(Z)	1	1	(Z)
Farm buildings, nonresidential	1 833 864	1 295 205	257 322	281 337	1 560 000	2	3	4	4	2
Amusement, social, and recreational buildings, indoors	4 386 332	3 122 184	964 432	299 716	3 042 739	1	1	2	3	1
Other nonresidential buildings	7 241 666	4 668 159	1 971 409	602 097	5 399 262	1	1	2	3	1
Nonbuilding construction	121 182 687	72 079 270	26 181 332	22 922 084	105 411 556	(Z)	(Z)	(Z)	(Z)	(Z)
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	37 035 357	18 989 650	10 927 356	7 118 351	33 663 977	(Z)	(Z)	(Z)	1	(Z)
Outdoor swimming pools	2 154 214	1 650 364	253 392	250 459	2 273 408	3	4	5	6	2
Airport runways and related work	1 732 903	1 032 856	497 333	202 714	209 737	1	1	1	2	4
Private driveways and parking areas	3 736 473	1 981 117	802 807	952 549	3 562 808	2	2	3	3	2
Fencing	1 467 137	1 087 467	203 074	176 597	1 102 962	4	4	6	5	3
Recreational facilities	1 682 949	1 279 523	257 666	145 761	1 081 146	2	2	4	5	3
Bridges, tunnels, and elevated highways	8 979 560	5 784 279	2 305 891	889 390	7 051 964	1	1	1	2	(Z)
Tunnels	1 165 672	1 027 730	83 867	54 075	853 957	3	4	3	5	1
Bridges and elevated highways	7 813 887	4 756 549	2 222 024	835 314	6 198 007	1	1	1	2	(Z)
Dam and reservoir construction	955 628	682 211	223 998	49 420	990 275	1	2	1	9	1
Marine construction	2 123 215	1 337 113	269 025	517 077	1 595 976	1	1	2	2	1
Harbor and port facilities	635 303	366 730	135 747	132 825	617 795	2	3	4	5	3
Conservation and development construction	4 280 544	2 993 065	652 944	634 534	1 520 508	1	2	3	2	2
Power and communication transmission lines, towers, and related facilities	7 100 934	4 308 293	1 279 870	1 512 771	6 232 290	1	1	1	1	1
Sewers, water mains, and related facilities	14 914 749	11 108 657	2 205 382	1 600 710	13 476 048	1	1	1	2	1
Sewers, sewer lines, septic systems, and related facilities	8 638 489	6 415 414	1 321 371	901 704	7 917 914	1	1	1	3	1
Water mains and related facilities	6 276 260	4 693 243	884 011	699 006	5 558 134	1	1	2	2	1
Pipeline construction other than sewer or water lines	5 309 208	3 633 188	777 974	898 046	3 259 866	1	1	1	2	1
Mass transit construction	2 092 262	1 191 960	595 764	304 538	1 416 178	2	2	2	4	1
Urban mass transit	1 053 972	690 845	308 468	54 659	730 144	2	3	1	1	(Z)
Railroad construction	1 038 290	501 115	287 296	249 879	686 035	3	3	(Z)	5	2
Blast furnaces, petroleum refineries, chemical complexes, etc.	11 555 013	5 802 610	1 674 800	4 077 603	6 776 004	(Z)	(Z)	1	(Z)	(Z)
Power plants	6 866 721	3 278 022	1 106 218	2 482 480	6 915 722	(Z)	(Z)	1	1	(Z)
Power plants, nuclear	1 314 090	375 241	243 996	694 853	2 302 509	1	1	1	1	(Z)
Power plants and cogeneration plants, except nuclear	5 552 631	2 902 781	862 222	1 787 627	4 613 214	(Z)	(Z)	1	1	(Z)
Sewage treatment and water treatment plants	6 529 397	4 494 959	1 710 939	323 500	6 057 721	1	1	1	2	1
Sewage treatment plants	4 402 483	3 077 895	1 147 916	176 671	4 099 467	1	2	2	3	1
Water treatment plants	2 126 915	1 417 064	563 022	146 829	1 958 255	1	1	1	3	1
Water storage facilities	420 918	246 633	(D)	(D)	(NA)	6	3	(D)	(D)	(NA)
Heavy military construction, missile sites, etc.	455 047	288 420	(D)	(D)	(NA)	1	1	(D)	(D)	(NA)
Ships	242 113	62 751	31 715	147 648	(NA)	4	10	7	5	(NA)
Oilfields	529 133	272 554	61 619	194 960	506 820	4	6	6	4	3
Other nonbuilding construction	383 910	206 850	77 386	99 674	7 100 351	4	5	9	5	1
Construction work, n.s.k.	16 109 071	(NA)	(NA)	(NA)	21 932 537	1	(NA)	(NA)	(NA)	1
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS										
Value of construction work	215 628 967	150 752 011	50 779 904	8 423 731	212 628 500	(Z)	(Z)	(Z)	1	(Z)
Building construction	207 749 879	149 081 572	50 369 687	8 298 619	201 934 849	(Z)	(Z)	(Z)	1	(Z)
Single-family houses	86 903 282	71 198 943	12 893 159	2 811 180	77 002 852	1	1	1	2	1
Single-family houses, detached	78 194 686	64 031 025	11 736 316	2 427 345	63 537 960	1	1	1	2	1
Single-family houses, attached, including townhouses and townhouse-type condominiums	8 708 597	7 167 918	1 156 843	383 835	13 464 892	2	2	4	5	2
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	7 814 610	5 073 129	2 186 621	554 860	11 875 587	2	2	2	4	2
Other residential buildings, including hotels, motels, and tourist cabins	3 704 529	2 486 430	1 071 985	146 113	7 170 875	1	1	3	7	1
Hotels, motels, and tourist cabins	2 309 642	1 668 476	580 423	60 743	4 202 120	2	2	5	5	2
Other residential buildings	1 394 887	817 954	491 562	85 370	2 968 755	3	3	5	11	2
Office buildings	21 764 787	11 996 034	8 803 495	965 258	30 306 156	1	1	1	2	(Z)
Other commercial buildings such as stores, restaurants, and automobile service stations	22 007 365	14 313 959	6 858 940	834 466	23 481 116	1	1	1	3	1
Industrial buildings and warehouses	24 026 930	16 227 273	5 998 289	1 801 367	24 150 548	1	1	1	1	1
Industrial buildings	19 196 348	12 550 161	5 064 535	1 581 653	18 119 921	1	1	1	1	1
Warehouses	4 830 581	3 677 113	933 754	219 715	6 030 627	1	1	3	3	1
Religious buildings	2 898 041	1 785 891	984 295	127 855	2 301 140	2	2	3	4	2
Educational buildings	14 190 557	9 424 321	4 477 949	288 287	8 686 646	1	1	2	5	1
Hospitals and institutional buildings	15 439 940	10 169 191	4 957 616	313 133	10 753 132	(Z)	(Z)	1	2	1
Farm buildings, nonresidential	1 152 192	925 155	133 079	93 958	997 017	3	3	6	9	4
Amusement, social, and recreational buildings, indoors	2 806 154	2 150 953	597 070	58 131	1 864 243	1	2	3	3	1
Other nonresidential buildings	5 041 490	3 330 292	1 407 189	304 009	3 345 537	1	1	2	4	1

Table 10. **Value of Construction Work for Establishments With Payroll by Industry Group and Type of Construction: 1992 and 1987—Con.**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry and type of construction	1992 value of construction work				1987 value of construction work	Relative standard error of estimate (percent) for column—				
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair		A	B	C	D	E
	A	B	C	D						
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS—Con.										
Value of construction work—Con.										
Nonbuilding construction	2 205 767	1 670 438	410 217	125 112	3 361 475	1	1	1	3	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	495 703	443 480	41 201	11 022	446 737	2	2	7	12	2
Outdoor swimming pools	6 282	4 560	(D)	(D)	13 417	18	19	(D)	(D)	29
Airport runways and related work	113 027	103 728	(D)	(D)	12 810	(Z)	(Z)	(D)	(D)	29
Private driveways and parking areas	41 573	32 304	7 199	2 070	46 259	14	18	18	25	5
Fencing	4 629	2 914	(D)	(D)	*2 506	28	21	(D)	(D)	41
Recreational facilities	31 201	23 000	6 773	1 429	50 625	12	16	3	26	10
Bridges, tunnels, and elevated highways	272 026	131 217	131 851	8 959	258 689	1	2	(Z)	7	1
Tunnels	44 381	(D)	(D)	5 263	78 535	2	(D)	(D)	11	(Z)
Bridges and elevated highways	227 645	(D)	(D)	3 696	180 154	1	(D)	(D)	9	1
Dam and reservoir construction	13 962	(D)	—	(D)	8 870	(Z)	(D)	—	(D)	14
Marine construction	(D)	(D)	(S)	(D)	50 767	(D)	(D)	(D)	(D)	3
Harbor and port facilities	5 990	(D)	(D)	(D)	66 557	(Z)	(D)	(D)	(D)	8
Conservation and development construction	31 416	16 757	(D)	(D)	35 878	8	14	(D)	(D)	5
Power and communication transmission lines, towers, and related facilities	118 892	98 771	8 905	11 216	49 445	3	2	20	11	4
Sewers, water mains, and related facilities	125 407	86 991	25 737	12 679	286 427	5	6	2	6	4
Sewers, sewer lines, septic systems, and related facilities	87 343	57 713	19 216	10 414	173 495	4	5	2	7	4
Water mains and related facilities	38 064	29 278	6 521	2 265	112 932	13	16	7	13	5
Pipeline construction other than sewer or water lines	30 993	27 028	(D)	(D)	15 439	(Z)	1	(D)	(D)	2
Mass transit construction	55 245	48 345	(D)	(D)	125 705	1	(Z)	(D)	(D)	2
Urban mass transit	49 679	(D)	(D)	—	78 240	(Z)	(D)	(D)	—	2
Railroad construction	5 566	(D)	(D)	(D)	47 465	6	(D)	(D)	(D)	2
Blast furnaces, petroleum refineries, chemical complexes, etc.	60 300	46 310	(D)	(D)	173 728	1	1	(D)	(D)	(Z)
Power plants	172 679	93 964	46 354	32 361	70 132	(Z)	(Z)	(Z)	1	(Z)
Power plants, nuclear	(D)	(D)	(D)	(D)	15 743	(D)	(D)	(D)	(D)	(Z)
Power plants and cogeneration plants, except nuclear	(D)	(D)	(D)	(D)	54 390	(D)	(D)	(D)	(D)	(Z)
Sewage treatment and water treatment plants	549 867	430 268	111 856	7 743	735 576	1	1	2	19	2
Sewage treatment plants	368 556	283 846	78 026	6 684	549 970	1	1	2	20	1
Water treatment plants	181 311	146 422	33 830	*1 059	185 607	2	2	1	65	5
Water storage facilities	(D)	(D)	(D)	—	(NA)	(D)	(D)	(D)	—	(NA)
Heavy military construction, missile sites, etc.	(D)	(D)	—	—	(NA)	(D)	(D)	—	—	(NA)
Oilfields	—	—	—	—	2 938	—	—	—	—	36
Other nonbuilding construction	4 448	(D)	(D)	(D)	908 970	31	(D)	(D)	(D)	2
Construction work, n.s.k.	5 673 321	(NA)	(NA)	(NA)	7 332 176	1	(NA)	(NA)	(NA)	1
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS										
Value of construction work	95 571 457	57 630 473	20 533 636	16 158 866	82 285 352	(Z)	(Z)	(Z)	(Z)	(Z)
Building construction	2 459 280	1 858 468	337 546	263 266	2 829 821	1	1	2	2	1
Single-family houses	400 393	331 966	40 060	28 367	335 213	3	3	8	8	5
Single-family houses, detached	358 602	302 241	31 832	24 529	277 710	3	3	10	8	5
Single-family houses, attached, including townhouses and townhouse-type condominiums	41 791	29 725	8 228	3 838	57 503	12	16	5	17	9
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	62 846	50 040	7 602	5 205	56 647	3	4	6	13	5
Other residential buildings, including hotels, motels, and tourist cabins	19 773	14 764	3 471	1 539	78 770	4	4	9	4	3
Hotels, motels, and tourist cabins	6 019	4 090	534	1 396	31 050	7	9	22	4	2
Other residential buildings	13 755	10 674	2 937	143	47 720	4	3	10	28	4
Office buildings	301 633	254 678	31 708	15 247	500 785	1	1	6	3	1
Other commercial buildings such as stores, restaurants, and automobile service stations	339 336	257 255	50 708	31 374	570 989	3	3	5	7	2
Industrial buildings and warehouses	809 048	545 374	98 769	164 906	727 195	1	1	4	2	1
Industrial buildings	752 372	506 393	86 973	159 006	653 848	1	1	3	2	1
Warehouses	56 676	38 981	11 795	5 900	73 346	6	6	18	10	7
Religious buildings	14 432	9 825	3 971	635	22 078	10	12	17	21	4
Educational buildings	209 140	154 759	50 548	3 833	171 250	2	1	8	10	2
Hospitals and institutional buildings	162 593	126 840	30 536	5 216	176 676	2	1	6	3	2
Farm buildings, nonresidential	7 351	5 794	607	(S)	16 418	15	18	15	(S)	14
Amusement, social, and recreational buildings, indoors	68 168	61 296	5 884	988	29 019	3	2	17	33	12
Other nonresidential buildings	64 567	45 877	13 683	5 008	144 781	2	2	4	4	4
Nonbuilding construction	91 863 695	55 772 005	20 196 090	15 895 600	77 383 902	(Z)	(Z)	(Z)	(Z)	(Z)
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	32 619 547	16 190 358	10 036 280	6 392 909	30 067 487	(Z)	(Z)	(Z)	1	(Z)
Outdoor swimming pools	2 775	2 306	(D)	(D)	16 979	18	20	(D)	(D)	13
Airport runways and related work	1 516 269	864 960	463 152	188 157	130 877	1	1	1	2	4
Private driveways and parking areas	556 499	282 052	158 315	116 132	674 335	2	1	4	4	2
Fencing	28 932	24 550	(D)	(D)	13 766	12	12	(D)	(D)	14
Recreational facilities	1 293 858	1 022 156	170 989	100 713	911 206	2	3	6	6	4
Bridges, tunnels, and elevated highways	7 923 969	5 310 703	1 982 492	630 773	6 288 782	1	1	1	2	(Z)
Tunnels	1 003 040	908 658	57 042	37 340	654 445	4	4	4	7	1
Bridges and elevated highways	6 920 929	4 402 045	1 925 450	593 433	5 634 337	1	1	1	2	1
Dam and reservoir construction	854 466	611 931	207 807	34 728	946 712	2	2	1	12	1
Marine construction	2 012 498	1 253 731	263 595	495 172	1 508 215	1	1	2	2	1
Harbor and port facilities	528 591	309 283	108 788	110 519	475 743	3	3	3	6	3
Conservation and development construction	3 735 072	2 587 463	604 812	542 797	1 334 665	2	2	4	2	2
Power and communication transmission lines, towers, and related facilities	5 051 308	3 170 274	771 952	1 109 082	3 781 641	1	1	1	1	1
Sewers, water mains, and related facilities	12 347 887	9 460 994	1 858 176	1 028 717	10 757 895	1	1	1	2	1
Sewers, sewer lines, septic systems, and related facilities	7 494 937	5 713 749	1 139 222	641 966	6 582 677	1	1	1	3	1
Water mains and related facilities	4 852 950	3 747 245	718 954	386 751	4 175 218	1	1	2	2	1
Pipeline construction other than sewer or water lines	4 800 292	3 361 943	672 571	765 778	2 910 925	1	1	1	2	1
Mass transit construction	1 587 960	883 970	449 724	254 267	861 651	2	3	3	5	2
Urban mass transit	581 086	391 224	170 066	19 797	290 472	3	5	(Z)	(Z)	(Z)

Table 10. **Value of Construction Work for Establishments With Payroll by Industry Group and Type of Construction: 1992 and 1987—Con.**

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry and type of construction	1992 value of construction work				1987 value of construction work	Relative standard error of estimate (percent) for column—				
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair		A	B	C	D	E
	A	B	C	D						
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS—Con.										
Value of construction work—Con.										
Nonbuilding construction—Con.										
Mass transit construction—Con.										
Railroad construction.....	1 006 874	492 746	279 658	234 470	571 179	3	3	4	5	3
Blast furnaces, petroleum refineries, chemical complexes, etc.	7 519 005	4 476 852	733 608	2 308 545	4 283 981	(Z)	(Z)	1	(Z)	(Z)
Power plants.....	4 384 809	2 509 059	378 273	1 497 477	4 702 951	(Z)	(Z)	1	(Z)	(Z)
Power plants, nuclear.....	1 037 094	307 726	(D)	(D)	1 689 526	1	2	(D)	(D)	(Z)
Power plants and cogeneration plants, except nuclear.....	3 347 715	2 201 334	(D)	(D)	3 013 425	(Z)	(Z)	(D)	(D)	(Z)
Sewage treatment and water treatment plants.....	4 291 596	2 924 992	1 216 516	150 087	3 692 550	1	2	1	4	1
Sewage treatment plants.....	2 950 321	2 025 817	838 827	85 677	2 592 669	2	2	2	6	1
Water treatment plants.....	1 341 275	899 175	377 689	64 410	1 099 881	1	1	2	4	1
Water storage facilities.....	(D)	(D)	(D)	(D)	(NA)	(D)	(D)	(D)	(D)	(NA)
Heavy military construction, missile sites, etc.	(D)	(D)	(D)	(D)	(NA)	(D)	(D)	(D)	(D)	(NA)
Ships.....	(S)	(S)	(S)	(S)	(NA)	(S)	(S)	(S)	(S)	(NA)
Oilfields.....	257 425	166 573	28 060	62 792	314 686	7	9	7	10	3
Other nonbuilding construction.....	6 479	(D)	(D)	(D)	3 708 855	30	(D)	(D)	(D)	3
Construction work, n.s.k.....	1 248 481	(NA)	(NA)	(NA)	2 071 629	3	(NA)	(NA)	(NA)	2
SPECIAL TRADE CONTRACTORS										
Value of construction work.....	216 905 423	110 725 256	54 917 933	42 074 966	200 432 460	(Z)	(Z)	(Z)	(Z)	(Z)
Building construction.....	180 604 930	96 088 429	49 342 907	35 173 594	163 237 549	(Z)	(Z)	(Z)	(Z)	(Z)
Single-family houses.....	54 702 806	33 381 312	11 014 285	10 307 209	44 864 148	(Z)	1	1	1	(Z)
Single-family houses, detached.....	47 751 597	29 003 313	9 859 818	8 888 466	37 459 660	(Z)	1	1	1	(Z)
Single-family houses, attached, including townhouses and townhouse-type condominiums.....	6 951 209	4 377 999	1 154 467	1 418 743	7 404 488	1	1	2	2	1
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.....	7 656 086	3 620 029	1 735 284	2 300 774	10 124 722	1	1	2	2	1
Other residential buildings, including hotels, motels, and tourist cabins.....	3 111 170	1 689 912	755 930	665 328	7 053 121	1	1	2	2	1
Hotels, motels, and tourist cabins.....	2 539 680	1 398 358	620 529	520 793	4 653 026	1	2	2	2	1
Other residential buildings.....	571 489	291 554	135 401	144 535	2 400 095	3	4	5	6	2
Office buildings.....	23 984 147	11 310 074	8 036 936	4 637 137	29 763 304	(Z)	(Z)	1	1	(Z)
Other commercial buildings such as stores, restaurants, and automobile service stations.....	25 415 360	13 601 782	6 431 639	5 381 938	22 215 926	(Z)	1	1	1	(Z)
Industrial buildings and warehouses.....	32 076 518	14 801 629	10 002 598	7 272 292	27 599 646	(Z)	(Z)	1	1	(Z)
Industrial buildings.....	27 167 552	12 075 584	8 698 764	6 393 204	22 695 211	(Z)	(Z)	1	1	(Z)
Warehouses.....	4 908 967	2 726 045	1 303 834	879 088	4 904 435	1	1	2	1	1
Religious buildings.....	2 762 696	1 303 538	854 110	605 049	2 212 156	1	1	1	1	1
Educational buildings.....	13 195 959	6 933 243	4 560 932	1 701 784	7 424 436	1	1	1	1	1
Hospitals and institutional buildings.....	13 378 250	6 880 729	4 915 544	1 581 978	8 375 104	(Z)	(Z)	1	1	(Z)
Farm buildings, nonresidential.....	674 321	364 256	123 635	186 429	546 565	3	4	5	4	3
Amusement, social, and recreational buildings, indoors.....	1 512 010	909 935	361 478	240 596	1 149 477	1	1	2	3	2
Other nonresidential buildings.....	2 135 608	1 291 991	550 537	293 080	1 908 944	2	2	4	5	2
Nonbuilding construction.....	27 113 224	14 636 826	5 575 026	6 901 373	24 666 179	1	1	1	1	1
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc.	3 920 108	2 355 813	849 875	714 420	3 149 753	1	1	2	2	1
Outdoor swimming pools.....	2 145 158	1 643 498	(D)	(D)	2 243 012	3	4	(D)	(D)	3
Airport runways and related work.....	103 607	64 167	(D)	(D)	66 050	4	2	(D)	(D)	9
Private driveways and parking areas.....	3 138 402	1 666 761	637 294	834 347	2 842 214	2	2	3	4	2
Fencing.....	1 433 576	1 060 003	199 399	174 175	1 086 690	4	4	6	5	3
Recreational facilities.....	357 890	234 367	79 905	43 618	119 315	4	5	7	10	6
Bridges, tunnels, and elevated highways.....	783 565	342 359	191 548	249 658	504 493	2	3	4	5	4
Tunnels.....	118 251	(D)	(D)	11 472	120 977	4	(D)	(D)	7	6
Bridges and elevated highways.....	665 314	(D)	(D)	238 186	383 516	3	(D)	(D)	5	5
Dam and reservoir construction.....	87 199	(D)	16 191	(D)	34 693	3	(D)	7	(D)	6
Marine construction.....	(D)	(D)	5 380	(D)	36 994	(D)	(D)	16	(D)	9
Harbor and port facilities.....	100 722	(D)	(D)	(D)	75 495	7	(D)	(D)	(D)	5
Conservation and development construction.....	514 055	388 845	(D)	(D)	149 965	4	4	(D)	(D)	9
Power and communication transmission lines, towers, and related facilities.....	1 930 734	1 039 248	499 013	392 474	2 401 204	2	2	2	3	2
Sewers, water mains, and related facilities.....	2 441 455	1 560 672	321 469	559 314	2 431 726	2	2	4	3	2
Sewers, sewer lines, septic systems, and related facilities.....	1 056 209	643 952	162 933	249 324	1 161 742	3	3	4	4	2
Water mains and related facilities.....	1 385 246	916 720	158 536	309 990	1 269 984	2	3	5	3	2
Pipeline construction other than sewer or water lines.....	477 923	244 217	(D)	(D)	333 502	2	2	(D)	(D)	3
Mass transit construction.....	449 057	259 646	(D)	(D)	428 822	1	1	(D)	(D)	6
Urban mass transit.....	423 207	(D)	(D)	34 862	361 432	1	(D)	(D)	1	1
Railroad construction.....	25 850	(D)	(D)	(D)	67 391	11	(D)	(D)	(D)	35
Blast furnaces, petroleum refineries, chemical complexes, etc.	3 975 708	1 279 448	(D)	(D)	2 318 295	1	1	(D)	(D)	1
Power plants.....	2 309 233	674 999	681 591	952 643	2 142 639	1	1	1	1	(Z)
Power plants, nuclear.....	(D)	(D)	(D)	140 127	597 240	(D)	(D)	(D)	1	(Z)
Power plants and cogeneration plants, except nuclear.....	(D)	(D)	(D)	812 517	1 545 399	(D)	(D)	(D)	1	1
Sewage treatment and water treatment plants.....	1 687 935	1 139 699	382 566	165 670	1 629 595	1	1	2	3	2
Sewage treatment plants.....	1 083 606	768 233	231 063	84 310	956 828	1	1	3	3	3
Water treatment plants.....	604 329	371 466	151 503	81 360	672 767	2	1	3	4	2
Water storage facilities.....	(D)	(D)	31 086	100 116	(NA)	(D)	(D)	10	20	(NA)
Heavy military construction, missile sites, etc.	(D)	(D)	10 870	7 860	(NA)	(D)	(D)	7	2	(NA)
Ships.....	241 833	62 751	31 715	147 367	(NA)	4	10	7	5	(NA)
Oilfields.....	271 707	105 980	33 558	132 169	189 196	4	6	10	4	6
Other nonbuilding construction.....	372 983	205 546	70 925	96 511	2 482 526	4	5	10	5	2
Construction work, n.s.k.....	9 187 269	(NA)	(NA)	(NA)	12 528 732	1	(NA)	(NA)	(NA)	1

Table 11. Quarterly Construction Worker Employment for Establishments With Payroll by Industry: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Number of establishments	Average number of construction workers	Construction workers ¹				Relative standard error of estimate (percent) for column—					
				January to March	April to June	July to September	October to December						
		A	B	C	D	E	F	A	B	C	D	E	F
15, 16, 17	Construction industries	572 851	3 596 200	3 279 642	3 650 182	3 872 139	3 582 836	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
15	Building construction—general contractors and operative builders	168 407	759 057	711 314	764 536	814 603	745 774	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
152	General contractors, residential buildings:												
1521	Single-family houses	107 495	296 236	274 874	301 505	321 730	286 835	(Z)	1	1	1	1	1
1522	Other residential buildings	6 490	35 107	33 802	36 735	36 607	33 284	3	2	2	2	2	2
1531	Operative builders	16 989	49 693	47 452	51 197	52 578	47 547	1	1	1	1	1	1
154	General contractors, nonresidential buildings:												
1541	Industrial buildings and warehouses ..	7 693	92 068	87 242	90 555	96 786	93 689	2	1	1	1	2	1
1542	Nonresidential buildings, n.e.c.	29 739	285 952	267 944	284 544	306 902	284 420	1	(Z)	(Z)	1	1	1
16	Heavy construction other than building construction—contractors	37 180	647 406	544 017	675 122	713 074	657 409	1	(Z)	(Z)	(Z)	(Z)	(Z)
1611	Highway and street construction	10 090	211 161	151 138	231 255	249 673	212 577	1	(Z)	(Z)	(Z)	(Z)	(Z)
162	Heavy construction, except highway:												
1622	Bridge, tunnel, and elevated highway construction	1 041	36 116	29 284	37 483	41 405	36 291	3	1	1	1	1	1
1623	Water, sewer, and utility lines	10 233	160 105	137 013	159 812	174 938	168 658	1	1	1	1	1	1
1629	Heavy construction, n.e.c.	15 816	240 024	226 582	246 572	247 058	239 883	1	(Z)	(Z)	(Z)	(Z)	1
17	Special trade contractors	367 263	2 189 738	2 024 312	2 210 524	2 344 462	2 179 653	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1711	Plumbing, heating, and air-conditioning--	75 395	455 117	433 552	455 916	476 968	454 034	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1721	Painting and paper hanging	31 920	136 427	115 216	141 506	158 841	130 145	1	1	1	1	1	1
1731	Electrical work	54 022	379 052	368 289	371 673	395 949	380 299	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
174	Masonry, stonework, tile setting, and plastering:												
1741	Masonry, stone setting, and other stonework	22 637	129 762	116 648	134 105	138 553	129 742	1	1	1	1	1	1
1742	Plastering, drywall, and insulation work	18 648	173 465	167 960	174 580	179 379	171 941	1	1	1	1	1	1
1743	Terrazzo, tile, marble, and mosaic work	6 499	26 941	26 602	27 696	28 066	25 403	2	2	2	2	2	2
175	Carpentry and floor work:												
1751	Carpentry	38 210	145 394	133 131	149 112	157 106	142 227	1	1	1	1	1	1
1752	Floor laying and other floorwork	10 196	36 434	35 739	36 414	38 680	34 905	1	1	1	1	1	1
1761	Roofing, siding, and sheet metal work ..	27 569	168 764	151 184	167 348	184 483	172 040	1	1	1	1	1	1
1771	Concrete work	26 123	160 750	128 140	170 607	181 828	162 426	1	1	1	1	1	1
1781	Water well drilling	3 638	14 683	13 863	14 887	15 616	14 364	2	2	2	2	2	2
179	Miscellaneous special trade contractors:												
1791	Structural steel erection	3 792	47 138	45 510	47 109	48 891	47 042	2	1	1	1	1	1
1793	Glass and glazing work	4 590	21 352	20 682	21 064	22 058	21 603	2	1	1	1	1	1
1794	Excavation work	13 898	62 437	51 774	64 810	69 804	63 360	1	1	1	1	1	1
1795	Wrecking and demolition work	966	10 409	9 430	10 611	11 375	10 220	4	2	2	2	2	2
1796	Installing building equipment, n.e.c.	3 889	64 380	67 104	58 918	65 180	66 319	2	1	(Z)	1	1	1
1799	Special trade contractors, n.e.c.	25 270	157 231	139 491	164 167	171 685	153 583	1	1	1	1	1	1

¹Construction workers during pay periods including 12th of March, May, August, and November.

Table 12. Value of Construction Work for Establishments With Payroll by Location of Construction Work and Industry Group: 1992

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Total	Building construction— general contractors and operative builders	Heavy construction other than building construction— contractors	Special trade contractors	Relative standard error of estimate (percent) for column—			
	A	B	C	D	A	B	C	D
United States	528 105 847	215 628 967	95 571 457	216 905 423	(Z)	(Z)	(Z)	(Z)
Alabama	6 951 298	2 766 396	1 658 385	2 526 518	1	2	1	1
Alaska	2 053 871	838 031	544 591	671 249	3	7	2	3
Arizona	9 589 024	4 390 937	1 437 347	3 760 740	1	2	1	1
Arkansas	3 369 320	1 220 693	815 961	1 332 666	1	3	2	2
California	65 586 751	28 414 338	9 219 418	27 952 995	(Z)	1	1	(Z)
Colorado	9 820 807	4 366 654	1 666 242	3 787 911	1	2	1	1
Connecticut	6 888 318	2 563 168	1 142 231	3 182 919	1	2	1	1
Delaware	2 073 773	800 015	393 024	880 735	2	4	1	2
District of Columbia	2 133 516	944 646	184 710	1 004 161	1	3	2	1
Florida	31 450 528	14 820 541	4 804 174	11 825 812	1	1	1	1
Georgia	13 735 421	6 498 924	2 221 945	5 014 552	1	2	1	1
Hawaii	5 558 404	2 551 726	1 168 777	1 837 901	1	2	1	1
Idaho	2 290 445	891 384	528 661	870 400	2	3	2	2
Illinois	26 775 737	10 055 667	4 096 995	12 623 074	1	1	1	1
Indiana	11 589 958	4 736 031	1 766 657	5 087 270	1	2	1	1
Iowa	4 996 920	1 753 811	1 129 563	2 113 546	1	3	1	1
Kansas	4 919 427	2 055 392	1 023 173	1 840 861	2	4	1	1
Kentucky	6 718 369	2 596 680	1 522 610	2 599 078	1	3	2	1
Louisiana	7 903 816	1 890 151	3 294 376	2 719 290	1	3	1	1
Maine	2 132 365	765 479	516 506	850 381	2	4	2	2
Maryland	12 884 968	5 972 302	1 708 939	5 203 728	1	2	1	1
Massachusetts	11 054 256	4 197 209	2 081 681	4 775 365	1	3	1	1
Michigan	16 131 386	6 002 845	2 363 872	7 764 669	1	2	1	1
Minnesota	10 546 812	4 272 481	1 835 684	4 438 646	1	2	1	1
Mississippi	3 398 199	1 188 401	1 068 127	1 141 671	2	4	2	2
Missouri	9 850 358	4 014 180	1 789 447	4 046 730	1	2	2	1
Montana	1 398 436	467 190	418 386	512 861	2	5	2	3
Nebraska	3 288 678	1 128 187	962 252	1 198 239	2	3	4	2
Nevada	6 243 372	2 673 999	1 251 545	2 317 828	1	2	1	1
New Hampshire	1 686 123	651 173	268 014	766 935	2	3	5	2
New Jersey	16 136 366	6 160 036	2 578 555	7 397 775	1	2	1	1
New Mexico	3 056 414	1 255 009	734 172	1 067 234	2	3	2	2
New York	31 911 435	11 195 941	5 064 936	15 650 558	(Z)	1	1	1
North Carolina	14 335 009	6 465 928	2 300 983	5 568 099	1	2	1	1
North Dakota	1 140 470	335 995	339 440	465 035	2	4	3	3
Ohio	20 840 164	8 266 548	3 477 623	9 095 993	1	1	1	1
Oklahoma	3 906 238	1 400 309	948 948	1 556 981	1	4	2	2
Oregon	6 291 808	2 528 110	1 149 975	2 613 723	1	3	1	1
Pennsylvania	23 670 089	9 345 749	4 072 725	10 251 615	(Z)	1	1	1
Rhode Island	1 712 672	789 743	230 700	692 229	2	3	5	2
South Carolina	6 450 137	2 908 956	1 082 660	2 458 521	1	2	2	1
South Dakota	1 392 098	560 402	363 616	468 080	2	5	4	3
Tennessee	8 769 583	3 457 309	1 981 993	3 330 280	1	2	1	1
Texas	35 609 383	14 222 077	8 935 726	12 451 580	1	1	1	1
Utah	3 427 102	1 380 176	750 647	1 296 279	1	3	2	2
Vermont	1 159 499	555 504	203 668	400 327	2	4	4	4
Virginia	15 216 862	6 858 789	2 728 973	5 629 100	1	2	1	1
Washington	15 553 070	7 242 201	2 626 059	5 684 810	1	2	1	1
West Virginia	2 568 212	791 915	813 157	963 139	1	3	1	2
Wisconsin	10 836 201	4 067 249	1 920 765	4 848 188	1	2	1	1
Wyoming	1 102 377	352 389	382 841	367 147	2	5	3	3

Table 13. Dollar Value of Business Done for Establishments With Payroll by Kind of Business Activity: 1992

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into a specific industry group. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activity	Total	Building construction—general contractors and operative builders	Heavy construction other than building construction—contractors	Special trade contractors	Relative standard error of estimate (percent) for column—			
	A	B	C	D	A	B	C	D
All kinds of business	539 084 657	220 231 215	98 528 182	220 325 260	(Z)	(Z)	(Z)	(Z)
BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS								
General building contractor	132 661 457	131 295 945	1 006 123	359 388	(Z)	(Z)	1	3
General building contractor, remodeling ¹	33 390 458	33 012 224	101 018	277 216	1	1	5	4
Operative builder	44 142 826	44 111 991	2 540	28 296	1	1	1	11
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS								
Blasting contractor, except building demolition	220 462	*61	197 053	23 348	6	62	7	6
Cable laying contractor	3 458 692	15 201	3 344 667	98 824	1	(Z)	1	2
Dredging contractor	681 838	68	(D)	(D)	3	(Z)	(D)	(D)
Excavating, earthmoving, and land clearing contractor, not connected with buildings	6 371 792	43 966	5 581 646	746 181	1	7	1	2
Heavy construction contractor	48 789 621	1 079 650	47 172 053	537 917	(Z)	1	(Z)	2
Highway and street general contractor	22 367 432	562 013	21 522 550	282 869	(Z)	(Z)	(Z)	2
Paving contractor	14 413 445	110 592	12 746 675	1 556 178	1	3	1	2
Pile driving contractors	360 592	(D)	341 792	(D)	3	(D)	3	(D)
Trenching contractor	479 861	(D)	400 892	(D)	4	(D)	5	(D)
SPECIAL TRADE CONTRACTORS								
Acoustical contractor	1 588 918	5 655	—	1 583 263	2	11	—	2
Antenna installation contractor, except household type	94 429	—	(D)	(D)	10	—	(D)	(D)
Architectural sheet metal contractor, including gutters and downspouts	1 122 862	2 440	(S)	1 120 124	2	25	(S)	2
Asbestos removal, lead paint removal, and radon remediation contractor	2 160 379	*863	*4 306	2 155 210	2	71	74	2
Asphalt contractor, private driveways and parking areas	2 429 186	5 493	180 171	2 243 523	2	28	3	2
Bridge painting contractor	227 694	(D)	(D)	223 964	5	(D)	(D)	5
Building sprinkler system installation contractor	2 852 226	986	*2 339	2 848 901	1	11	46	1
Carpentry contractor	10 253 218	102 128	6 179	10 144 911	1	7	16	1
Carpet laying or removal contractor	2 167 405	1 024	—	2 166 381	2	32	—	2
Computer floor installation contractor	172 885	(D)	(D)	171 532	8	(D)	(D)	8
Concrete breaking for streets and highways contractor	59 402	(D)	(D)	57 986	6	(D)	(D)	6
Concrete contractor, except paving of roads, highways, and streets	6 805 319	107 700	103 350	6 594 269	1	8	3	1
Concrete cutting contractor	261 094	(S)	3 974	257 068	5	(S)	24	5
Culvert and curb construction contractor	1 082 797	*3 047	55 994	1 023 756	3	43	5	3
Curtain wall installation contractor	363 842	4 261	1 601	357 981	3	34	32	3
Drywall, sheetrock, spackling and finishing contractor	6 790 882	(D)	(D)	6 732 642	1	(D)	(D)	1
Electric power installation and service contractor, including lighting	28 425 596	41 599	34 940	28 349 057	(Z)	12	2	(Z)
Electronic control systems installation and service contractor	2 427 015	(D)	(D)	2 416 037	1	(D)	(D)	1
Elevator installation and service contractor	3 384 378	(D)	(D)	3 384 186	(Z)	(D)	(D)	(Z)
Energy management contractor	226 979	—	—	226 979	7	—	—	7
Escalator installation and service contractor	263 067	*595	(D)	(D)	(Z)	64	(D)	(D)
Excavating, earth and land clearing contractor, connected with buildings	5 923 757	60 039	745 601	5 118 117	1	7	1	1
Fence construction contractor	1 747 753	6 232	32 204	1 709 318	3	35	10	3
Fire and security systems installation and service contractor	2 645 687	4 239	8 737	2 632 711	1	13	(Z)	1
Flooring contractor, wood	1 024 509	8 953	—	1 015 556	3	13	—	3
Foundation contractor: brick, block, or stone	1 002 901	(D)	(D)	995 660	3	(D)	(D)	3
Foundation contractor, concrete	2 546 138	30 289	19 869	2 495 980	2	12	20	2
Foundation contractor, digging of	752 188	4 200	57 807	690 181	2	22	5	2
Garage and overhead door installation contractor	1 377 525	*1 004	—	1 376 522	3	40	—	3
Glass and glazing contractor	2 679 334	4 000	—	2 675 334	1	12	—	1
Glass coating and tinting contractor	33 707	—	—	33 707	18	—	—	18
Gunite contractor	256 866	(S)	1 219	255 313	7	(S)	29	7
Heating, ventilation and air-conditioning contractor	21 104 475	20 587	7 151	21 076 736	1	12	7	1
Highway lighting and signal installation and service contractor	1 321 284	(D)	23 838	(D)	2	(D)	7	(D)
House moving contractor	85 468	(D)	(D)	(D)	11	(D)	(D)	(D)
Insulation contractor	3 291 099	11 261	—	3 279 839	2	19	—	2
Insulation contractor, pipe and duct work	1 068 783	—	—	1 068 783	2	—	—	2
Lathing contractor	511 586	691	—	510 894	2	17	—	2
Lawn sprinkler system installation contractor	367 908	(D)	(D)	363 217	6	(D)	(D)	6
Linoleum, asphalt resilient or vinyl tile installation contractor	949 033	5 578	—	943 455	2	19	—	2
Marble contractor, exterior	119 253	—	—	119 253	5	—	—	5
Marble contractor, interior	519 577	*220	—	519 357	4	67	—	4
Masonry contractor, brick and block	5 838 531	20 840	6 007	5 811 684	1	13	4	1
Masonry: pointing, cleaning or caulking contractor	322 371	4 101	—	318 270	4	35	—	5
Mechanical contractor	11 612 284	20 895	48 832	11 542 558	1	2	2	1
Millwright	2 842 882	127 452	38 536	2 676 895	1	(Z)	1	1
Modular furniture systems attachment and installation contractor	431 246	5 945	—	425 301	5	7	—	5
Mosaic contractor	4 717	—	—	4 717	4	—	—	4
Ornamental metal contractor	448 861	1 935	—	446 926	4	6	—	4
Painting contractor	7 245 143	46 453	5 646	7 193 045	1	8	20	1
Paper hanging contractor	708 695	(D)	(D)	704 998	2	(D)	(D)	2
Plastering contractor	1 434 215	*245	—	1 433 970	2	49	—	2
Plumbing contractor	14 408 010	8 148	24 787	14 375 074	1	11	5	1
Post frame contractor	449 508	1 926	—	447 582	5	15	—	5
Precast concrete installation contractor	341 258	2 870	5 125	333 263	4	5	23	4

See footnotes at end of table.

Table 13. Dollar Value of Business Done for Establishments With Payroll by Kind of Business Activity: 1992—Con.

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into a specific industry group. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activity	Total	Building construction—general contractors and operative builders	Heavy construction other than building construction—contractors	Special trade contractors	Relative standard error of estimate (percent) for column—			
	A	B	C	D	A	B	C	D
SPECIAL TRADE CONTRACTORS—Con.								
Refractory brick contractor	371 123	(D)	(D)	(D)	3	(D)	(D)	(D)
Refrigeration contractor	1 596 460	(D)	(D)	1 592 783	2	(D)	(D)	2
Reinforcing steel contractor	1 127 043	*10 332	4 945	1 111 766	2	41	6	2
Roofing contractor	9 960 072	61 683	1 975	9 896 414	1	9	36	1
Sandblasting contractor, building exteriors	324 673	(S)	2 962	318 819	6	(S)	15	7
Scaffolding construction contractor	313 125	229	—	312 896	2	21	—	2
Septic system installation contractor	558 895	(S)	23 679	531 005	5	(S)	15	5
Service station equipment installation contractor	849 760	1 927	1 292	846 541	3	(Z)	39	3
Sheet metal contractor	4 720 704	6 842	1 468	4 712 394	1	27	8	1
Ship painting contractor	87 128	—	(D)	(D)	3	—	(D)	(D)
Siding contractor	1 671 076	24 005	—	1 647 071	3	13	—	3
Specialty sheet metal contractor, including decking and metal ceilings	469 488	*474	—	469 014	4	59	—	4
Steam fitting and piping contractor	1 929 085	7 030	4 639	1 917 417	1	3	22	1
Steel tank dismantling contractor	60 125	—	(S)	59 868	9	—	(S)	9
Stonework contractor	516 770	1 397	627	514 745	4	24	22	4
Storage tanks, metal: erection contractor	537 172	4 856	20 205	512 112	3	38	9	3
Structural steel erection contractor	2 615 630	9 478	12 227	2 593 926	1	15	11	1
Subdividing and preparing land owned by others contractor	111 982	—	8 371	103 611	9	—	26	10
Swimming pool contractor	1 910 140	4 355	1 360	1 904 425	4	29	32	4
Telecommunications installation and service contractor	4 568 814	2 377	22 823	4 543 614	1	1	4	1
Terrazzo contractor	161 922	—	—	161 922	4	—	—	4
Test boring or core drilling contractor for construction	460 372	*324	5 739	454 310	4	47	4	4
Tile setting contractor	1 770 566	(D)	(D)	1 767 478	2	(D)	(D)	2
Traffic lane painting contractor	334 585	(D)	(D)	328 174	5	(D)	(D)	5
Water well drilling contractor	1 718 722	(D)	(D)	1 698 843	1	(D)	(D)	1
Waterproofing, dampproofing and fireproofing contractor	1 216 440	5 475	2 201	1 208 765	2	17	28	2
Welding contractor, operating at the site of construction	634 152	3 286	10 674	620 193	3	31	11	3
Wrecking and demolition contractor, buildings and other structures	975 774	6 741	33 423	935 611	2	9	8	2
Special cases	3 151 005	11 330	746 742	2 392 933	(NA)	(NA)	(NA)	(NA)
Other construction activities	771 818	88 943	53 011	629 865	4	7	8	5
OTHER BUSINESS ACTIVITIES								
Architectural services	179 274	174 661	(S)	4 084	5	5	(S)	25
Building construction on land owned by you, for rent or lease	495 043	476 397	2 640	16 006	3	3	12	27
Construction management services	1 770 473	1 365 133	325 245	80 094	1	1	1	7
Engineering services	760 223	94 694	505 685	159 843	1	6	(Z)	5
Manufacturing	1 314 112	106 584	679 896	527 632	1	9	1	2
Mining services	427 422	17 753	398 216	11 453	1	4	1	11
Real estate commissions and management fees	280 618	262 057	7 787	10 774	4	4	3	12
Rental of construction machinery or equipment to others	604 889	109 371	277 921	217 597	1	3	2	2
Rental or lease of properties	471 503	406 056	23 240	42 206	2	3	4	7
Retail trade	1 775 838	201 873	274 839	1 299 126	1	4	2	2
Subdividing and preparing your own land for sale, rent, or lease	808 909	793 976	*10 544	4 389	3	3	71	23
Transportation of goods for others	296 137	23 822	154 031	118 284	3	10	4	3
Wholesale trade	583 357	33 049	87 049	463 258	2	22	3	2
Other business activities	1 008 621	525 023	127 226	356 373	1	2	3	2
Kind of business activity, n.s.k.	6 778 341	4 223 811	127 298	2 427 231	1	1	5	2

¹In 1987, this item, for the most part, represented the value of residential remodeling general contractor work. For 1992, it represents the value of both residential and nonresidential remodeling general contractor work.

Table 14. Dollar Value of Business Done for Establishments With Payroll by Kind of Business Activity: 1987

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into a specific industry group. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activity	Construction industries	Building construction—general contractors and operative builders	Heavy construction other than building construction—contractors	Special trade contractors	Relative standard error of estimate (percent) for column—			
	A	B	C	D	A	B	C	D
All kinds of business.....	514 937 596	225 188 140	85 672 568	204 076 888	(Z)	(Z)	(Z)	(Z)
General building contractor	148 214 732	145 789 348	1 705 250	720 132	(Z)	(Z)	1	3
Operative builder	47 091 208	47 030 988	7 709	52 510	1	1	10	12
Residential remodeling contractor	9 682 688	9 475 027	4 567	203 093	1	1	24	7
Highway and street contractor.....	21 272 525	216 647	20 743 248	312 629	(Z)	2	(Z)	3
Paving contractor	10 337 923	52 301	9 326 249	959 372	1	6	1	4
Heavy construction:								
Heavy construction contractor.....	40 368 309	1 324 439	38 371 682	672 187	(Z)	1	(Z)	2
Cable laying contractor	1 604 902	(D)	1 579 490	(D)	2	(D)	2	(D)
Dredging contractor	550 592	(D)	548 679	(D)	1	(D)	1	(D)
Trenching contractor	601 043	1 964	586 459	12 619	3	11	3	12
Excavating and earthmoving contractor	6 639 595	93 179	6 271 510	274 905	1	8	1	4
Pile driving contractor	318 516	(D)	301 652	(D)	3	(D)	3	(D)
Blasting contractor	122 023	—	114 780	7 242	8	—	9	16
Subdivider and developer	1 040 216	1 018 249	13 164	8 802	3	3	36	33
Subdividing land owned by others	751 481	60 261	39 270	651 948	4	11	16	4
Heating, ventilation, and air-conditioning contractor	18 786 322	34 126	34 243	18 717 948	1	4	16	1
Building sprinkler system contractor	1 970 086	—	3 767	1 866 318	1	—	17	1
Energy management contractor	110 307	—	—	110 307	7	—	—	7
Lawn sprinkler system contractor	327 478	*272	5 342	321 863	5	49	11	5
Mechanical contractor	9 223 322	23 127	42 115	9 158 079	1	3	10	1
Plumbing contractor	13 561 747	29 546	26 811	13 505 389	1	9	6	1
Refrigerator contractor	1 201 130	9 365	—	1 191 765	3	1	—	3
Septic system contractor	509 131	8 818	23 453	476 860	4	17	10	5
Steam fitting and piping contractor.....	2 057 661	(D)	(D)	2 039 812	1	(D)	(D)	1
Painting construction:								
Bridge painting contractor.....	164 711	(D)	(D)	161 898	9	(D)	(D)	10
Painting contractor	6 653 441	42 350	3 288	6 607 802	1	7	9	1
Ship painting contractor	71 684	—	—	71 684	6	—	—	6
Traffic lane painting contractor	186 473	—	8 035	178 437	7	—	13	7
Paper hanging contractor	743 128	5 704	—	737 423	2	15	—	2
Electrical contractor:								
Electric power contractor	27 096 254	40 377	37 088	27 018 788	(Z)	7	2	(Z)
Electronic control system contractor	1 709 205	(D)	(D)	1 700 629	1	(D)	(D)	1
Highway lighting and signal contractor	867 037	145	11 417	855 474	2	24	(Z)	2
Fire and security systems contractors	1 981 378	1 723	575	1 979 079	1	9	21	1
Telecommunications contractor.....	3 887 235	1 915	16 906	3 868 412	1	28	21	1
Masonry contractor:								
Marble contractor, exterior	234 159	(D)	(D)	233 339	5	(D)	(D)	5
Masonry contractor, block and brick	6 887 226	26 828	4 494	6 855 902	1	12	32	1
Stonework contractor	434 171	(D)	(D)	426 104	5	(D)	(D)	6
Foundation contractor, masonry	1 063 016	7 033	(S)	1 055 881	3	27	(S)	3
Acoustical contractor	1 888 370	15 049	—	1 873 320	1	4	—	1
Drywall contractor	7 883 302	37 524	*2 823	7 842 955	1	5	51	1
Insulation contractor	3 485 155	6 580	—	3 478 574	1	20	—	1
Lathing contractor	(D)	(D)	—	710 004	(D)	(D)	—	2
Plastering contractor	1 820 034	8 641	—	1 811 393	2	13	—	2
Marble contractor, interior	342 349	599	—	341 750	3	35	—	4
Mosaic contractor	7 670	—	—	7 670	18	—	—	18
Terrazzo contractor	170 671	—	—	170 671	4	—	—	4
Tile setting contractor	1 867 234	2 838	—	1 864 396	2	39	—	2
Carpentry contractor	9 628 458	137 919	7 328	9 483 210	1	6	17	1
Garage door installation contractor	882 472	3 191	—	879 280	4	21	—	4
Floor covering contractor, except wood:								
Computer or resilient floor installation contractor	307 419	1 270	*799	305 350	8	39	42	8
Linoleum, asphalt or vinyl tile installation contractor	680 672	1 789	(S)	677 301	2	15	(S)	2
Carpet laying or removal contractor	1 798 830	(D)	(D)	1 797 569	2	(D)	(D)	2
Flooring contractor, wood.....	676 287	(D)	(D)	675 112	3	(D)	(D)	3
Architectural sheet metal contractor	1 009 582	4 892	*32	1 004 657	2	19	52	2
Roofing contractor	8 870 759	45 274	4 903	8 820 581	1	8	(Z)	1
Sheet metal contractor	4 091 395	(D)	(D)	4 085 372	1	(D)	(D)	1
Siding contractor.....	1 222 957	(D)	(D)	1 198 146	4	(D)	(D)	4
Specialty sheet metal contractor.....	324 885	(D)	(D)	321 258	6	(D)	(D)	6
Concrete construction:								
Asphalt contractor	2 567 925	2 643	161 367	2 403 914	2	28	4	2
Concrete contractor	7 926 670	83 487	96 520	7 746 562	1	4	4	1
Guniting contractor	186 541	(D)	(D)	186 166	4	(D)	(D)	4
Culvert and curb contractor	269 177	2 286	26 329	240 561	6	28	7	7
Foundation contractor, concrete	2 969 469	47 636	27 604	2 894 229	1	4	6	1
Water well drilling contractor	1 269 128	—	7 614	1 261 514	2	—	11	2
Reinforcing steel contractor	975 827	3 677	7 566	964 583	2	10	(Z)	2
Structural steel erection contractor	(D)	27 688	(D)	3 048 731	(D)	15	(D)	1
Curtain wall installation contractor	233 424	1 532	—	231 892	1	(Z)	—	1
Glass and glazing contractor	3 070 146	(D)	(D)	3 064 692	1	(D)	(D)	1
Glass, coating, and tinting contractor	17 532	—	—	17 532	26	—	—	26
Excavation contractor, for buildings	5 310 770	78 126	310 274	4 922 369	1	7	3	1
Foundation contractor, digging of	1 522 470	10 957	93 965	1 417 547	2	18	4	2

CONSTRUCTION—INDUSTRY SERIES

U.S. SUMMARY—WITH PAYROLL 27–23

Table 14. Dollar Value of Business Done for Establishments With Payroll by Kind of Business Activity: 1987—Con.

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into a specific industry group. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activity	Construction industries	Building construction—general contractors and operative builders	Heavy construction other than building construction—contractors	Special trade contractors	Relative standard error of estimate (percent) for column—			
	A	B	C	D	A	B	C	D
All kinds of business—Con.								
Wrecking and demolition construction:								
Steel tank dismantling contractor	9 499	(D)	(D)	7 310	24	(D)	(D)	30
Wrecking and demolition contractor	918 999	4 138	26 942	887 918	1	21	6	1
Concrete breaking contractor, highways and streets	78 560	(D)	(D)	75 438	9	(D)	(D)	9
Elevator contractor	2 878 677	(S)	*1 032	2 877 269	(Z)	(S)	59	(Z)
Escalator contractor	153 614	(D)	(D)	152 664	1	(D)	(D)	1
Millwright	2 096 995	45 923	23 478	2 027 593	2	2	3	2
Antenna installation contractor	84 367	(S)	*3 310	80 777	11	(S)	44	11
Fencing contractor	1 346 489	*3 358	19 479	1 323 651	3	42	6	3
House moving contractor	143 747	(D)	(D)	137 288	9	(D)	(D)	9
Iron work contractor	573 833	761	(S)	573 066	3	23	(S)	3
Insulation contractor, pipe and duct work	(D)	—	(D)	1 171 148	(D)	—	(D)	2
Sandblasting contractor	195 745	—	988	194 757	8	—	16	8
Scaffolding contractor	127 259	305	—	126 953	4	(Z)	—	4
Service station equipment installation contractor	529 874	4 884	(S)	524 600	4	8	(S)	4
Swimming pool contractor	2 009 910	4 445	2 048	2 003 416	3	31	35	3
Test boring or core drilling contractor	205 604	(D)	(D)	194 906	5	(D)	(D)	5
Waterproofing, dampproofing and fireproofing contractor	944 277	10 412	197	933 667	2	2	27	2
Welding contractor, on site	443 152	1 716	5 580	435 855	4	26	17	4
Other construction activities	4 940 439	912 020	618 841	3 409 645	1	2	3	2
Architectural services	195 035	174 540	17 707	2 788	2	3	3	15
Construction management	2 554 990	1 683 317	847 089	24 582	1	1	(Z)	17
Engineering services	553 551	122 371	409 994	21 185	2	8	(Z)	11
Manufacturing	1 084 273	167 769	589 507	326 996	1	3	1	2
Real estate agents and managers	583 017	565 779	3 035	14 202	2	2	10	10
Rental or construction machinery or equipment to others	644 072	129 470	316 710	197 891	1	2	1	2
Retail trade	(D)	(D)	(D)	1 268 072	1	1	19	9
Wholesale trade	(D)	(D)	(D)	490 995	(D)	(D)	(D)	2
Investment builder	823 292	810 273	942	12 076	2	2	34	7
Other activities ¹	11 080 881	8 824 831	980 592	1 275 457	1	1	1	1
Kind of business activity, n.s.k.	10 873 210	5 526 440	946 583	4 400 186	1	1	3	2

¹In 1987, receipts from the sale of land were collected and have been included in other activities. For 1992, respondents were instructed to exclude receipts from the sale of land from dollar value of business done.

Table 15. **Selected Industry Ratios for Establishments With Payroll: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
15, 16, 17	Construction industries -----	8.1	25.2	146.9	.223	.317	.259	.270	.016
15	Building construction—general contractors and operative builders -----	6.5	24.7	284.1	.126	.261	.468	.032	.008
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.8	18.0	164.2	.150	.356	.308	.038	.008
1522	Other residential buildings -----	7.5	23.8	223.2	.148	.256	.446	.043	.008
1531	Operative builders -----	6.7	29.4	897.3	.075	.294	.398	.009	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	16.0	28.3	223.6	.169	.240	.467	.066	.012
1542	Nonresidential buildings, n.e.c. -----	13.7	29.0	328.7	.126	.201	.586	.031	.008
16	Heavy construction other than building construction—contractors -----	21.5	29.7	147.6	.248	.328	.189	.178	.032
1611	Highway and street construction -----	25.5	28.6	167.3	.208	.381	.211	.208	.032
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	42.0	34.0	199.3	.206	.323	.261	.122	.025
1623	Water, sewer, and utility lines -----	19.0	29.0	126.2	.278	.301	.130	.186	.037
1629	Heavy construction, n.e.c. -----	19.2	30.5	136.8	.282	.288	.185	.153	.030
17	Special trade contractors -----	7.5	24.1	99.1	.309	.369	.083	.548	.017
1711	Plumbing, heating, and air-conditioning -----	8.1	27.1	125.0	.292	.388	.108	.518	.015
1721	Painting and paper hanging -----	5.1	19.5	63.7	.364	.264	.068	.516	.018
1731	Electrical work -----	9.0	28.0	106.2	.338	.384	.043	.557	.014
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework ---	6.5	19.5	65.2	.341	.337	.059	.711	.014
1742	Plastering, drywall, and insulation work -----	11.1	23.8	81.0	.349	.345	.088	.829	.012
1743	Terrazzo, tile, marble, and mosaic work -----	5.2	22.8	90.5	.318	.413	.048	.783	.012
175	Carpentry and floor work:								
1751	Carpentry -----	4.6	19.6	88.4	.271	.370	.118	.576	.012
1752	Floor laying and other floorwork -----	4.8	21.8	121.5	.241	.447	.089	.606	.014
1761	Roofing, siding, and sheet metal work -----	7.8	21.4	99.5	.275	.409	.071	.421	.014
1771	Concrete work -----	7.4	21.0	89.7	.280	.392	.086	.611	.022
1781	Water well drilling -----	5.3	22.9	117.6	.257	.408	.030	.151	.016
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	15.3	28.1	105.1	.329	.325	.094	.691	.028
1793	Glass and glazing work -----	7.0	24.8	127.6	.292	.514	.033	.701	.021
1794	Excavation work -----	5.5	23.6	110.0	.264	.287	.108	.574	.044
1795	Wrecking and demolition work -----	13.6	22.6	101.8	.280	.196	.124	.409	.049
1796	Installing building equipment, n.e.c. -----	21.3	28.1	102.7	.352	.269	.072	.273	.018
1799	Special trade contractors, n.e.c. -----	8.1	21.7	86.9	.325	.333	.098	.377	.022

Table 16. Selected Statistics for Establishments With Payroll by Industry: Percent Change 1992/ 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Employees**		Payroll		Value of construction work	Net value of construction work†	Selected costs		Value added‡	Total capital expenditures, other than land
		All	Construction workers	All employees	Construction workers			Materials, components, supplies, and fuels	Construction work subcontracted out to others		
15, 16, 17	Construction industries -----	-6.9	-9.6	6.8	4.3	6.6	7.1	11.8	5.2	2.9	-4.6
15	Building construction—general contractors and operative builders -----	-14.2	-18.0	-2.8	-6.3	1.4	3.3	10.1	-7	-3.7	-24.7
152	General contractors, residential buildings:										
1521	Single-family houses -----	1.9	-3.6	16.0	12.1	24.4	23.2	29.6	27.1	14.8	-10.4
1522	Other residential buildings -----	-40.3	-42.7	-33.7	-36.5	-41.2	-30.7	-30.4	-50.5	-32.9	-44.3
1531	Operative builders -----	-32.4	-37.5	-23.4	-29.3	-8.9	-	-4	-19.8	.8	-55.4
154	General contractors, nonresidential buildings:										
1541	Industrial buildings and warehouses -----	-14.0	-16.9	-3.9	-7.5	-4.1	-1.1	-2.6	-7.2	-6.5	-27.5
1542	Nonresidential buildings, n.e.c. -----	-16.7	-22.1	-3	-7.4	4.7	-1.5	13.7	9.5	-12.4	-4.9
16	Heavy construction other than building construction—contractors -----	-3.3	-5.3	16.3	14.0	16.1	13.3	16.5	30.3	9.4	7.4
1611	Highway and street construction -----	-9.5	-11.7	4.5	1.1	3.4	-4	10.1	20.9	-8.2	-5.3
162	Heavy construction, except highway:										
1622	Bridge, tunnel, and elevated highway construction ----	-8.0	-9.9	24.6	23.7	31.3	27.0	25.4	45.5	26.7	2.3
1623	Water, sewer, and utility lines -----	-1.7	-3.5	24.6	24.1	18.8	16.8	16.6	33.9	16.3	10.0
1629	Heavy construction, n.e.c. -----	2.2	.8	20.9	18.5	28.1	26.2	24.5	37.4	21.8	31.4
17	Special trade contractors -----	-4.7	-7.6	8.1	5.1	8.2	7.1	11.2	22.7	4.1	-3.4
1711	Plumbing, heating, and air-conditioning -----	-8	-3.3	15.9	14.3	14.9	14.0	14.3	23.3	13.6	4.7
1721	Painting and paper hanging -----	-4.3	-6.2	6.2	3.5	9.3	8.7	27.0	17.2	2.4	-1.6
1731	Electrical work -----	-4.4	-6.6	7.6	4.3	12.3	11.2	16.4	45.6	7.9	2.5
174	Masonry, stonework, tile setting, and plastering:										
1741	Masonry, stone setting, and other stonework -----	-12.5	-13.7	-2.2	-3.9	-2.9	-3.8	-2	12.8	-6.0	-13.8
1742	Plastering, drywall, and insulation work -----	-18.5	-20.2	-10.5	-12.0	-14.4	-15.3	-15.1	-4.5	-16.5	-28.4
1743	Terrazzo, tile, marble, and mosaic work -----	-1.2	-3.5	5.6	2.5	7.4	6.4	10.9	29.5	3.1	-27.0
175	Carpentry and floor work:										
1751	Carpentry -----	-6.7	-11.4	6.6	2.8	14.3	12.9	14.0	26.0	11.2	4.9
1752	Floor laying and other floorwork -----	9.8	5.1	17.5	12.1	21.3	19.6	22.9	41.0	15.2	11.5
1761	Roofing, siding, and sheet metal work -----	-6.7	-9.7	7.2	3.8	11.7	9.9	16.7	41.8	4.5	-6.6
1771	Concrete work -----	-11.8	-14.0	-3.3	-5.6	-4.2	-4.9	1.5	3.4	-8.8	-9.8
1781	Water well drilling -----	9.9	7.7	32.4	29.8	29.9	29.0	26.4	66.9	27.6	12.6
179	Miscellaneous special trade contractors:										
1791	Structural steel erection -----	-11.3	-13.9	2.2	-4	1.8	-5	15.0	32.0	-7.1	8.4
1793	Glass and glazing work -----	-20.8	-25.7	-13.4	-18.5	-15.5	-16.2	-15.3	12.8	-16.3	-36.6
1794	Excavation work -----	-19.1	-21.2	-11.8	-12.3	-16.7	-18.2	-9	-1.7	-24.0	-28.8
1795	Wrecking and demolition work -----	-7.1	-10.9	13.2	9.8	16.1	9.9	89.9	93.5	-9	-43.4
1796	Installing building equipment, n.e.c. -----	33.0	28.1	25.1	20.4	23.3	22.4	24.3	36.8	20.7	45.7
1799	Special trade contractors, n.e.c. -----	16.0	11.0	43.6	37.5	26.4	25.3	23.3	36.7	24.9	46.1

Table 17. Employment and Payroll for Auxiliary Establishments by Industry Group: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	All auxiliaries	Centralized administration offices	Warehousing	Research and development	Other activities
		A	B	C	D	E
15, 16 17	Construction industries					
	Number of establishments	337	282	8	2	45
	All employees as of March 12	14 677	13 084	55	(D)	(D)
	Annual payroll, all employees	712 766	637 298	1 098	(D)	(D)
15	Building construction—general contractors and operative builders					
	Number of establishments	82	74	2	—	6
	All employees as of March 12	3 427	3 385	(D)	—	(D)
	Annual payroll, all employees	162 180	160 710	(D)	—	(D)
16	Heavy construction other than building construction—contractors					
	Number of establishments	107	84	2	—	21
	All employees as of March 12	5 606	4 894	(D)	—	(D)
	Annual payroll, all employees	270 621	243 109	(D)	—	(D)
17	Special trade contractors					
	Number of establishments	148	124	4	2	18
	All employees as of March 12	5 644	4 805	(D)	(D)	(D)
	Annual payroll, all employees	279 965	233 479	(D)	(D)	(D)

Note: Annual payroll, all employees shown in thousand dollars.

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
- **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
- **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- **Outdoor swimming pools.** Includes wading pools and reflecting pools.
- **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
- **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
- **Fencing.** Includes all types of fencing.
- **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
- **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
- **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- **Harbor and port facilities.** Includes docks, piers, and wharves.
- **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
- **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
- **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
- **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
- **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

Nonbuilding construction:

- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.

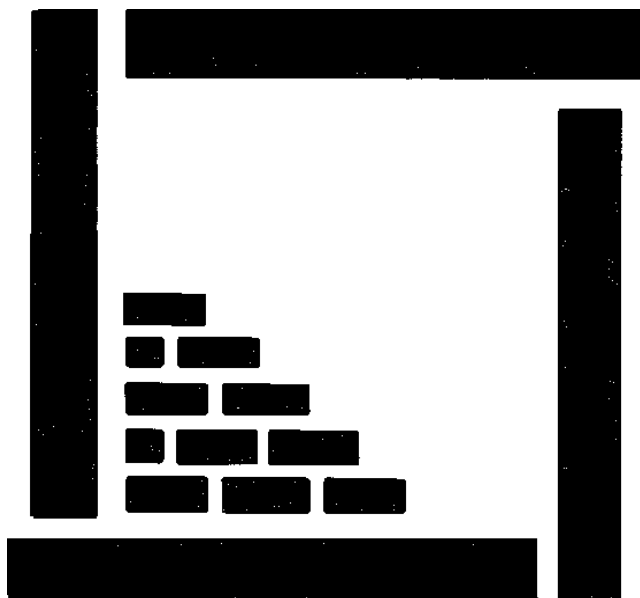
1992

Census of Construction Industries

CC92-S-1

SUBJECT SERIES

Legal Form of Organization and Type of Operation



1992

Census of

Construction Industries

CC92-S-1

SUBJECT SERIES

Legal Form of Organization and Type of Operation

Issued November 1995



U.S. Department of Commerce

Ronald H. Brown, Secretary

David J. Barram, Deputy Secretary

Economics and Statistics Administration

**Everett M. Ehrlich, Under Secretary
for Economic Affairs**

BUREAU OF THE CENSUS

Martha Farnsworth Riche, Director

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If you have any questions concerning the statistics in this report, call 301-457-4680.



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, finance, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*¹ (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction. The SIC manual defines construction in three broad types of activity:

1. **Building construction by general contractors or by operative builders.** General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors.** Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction, if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets, and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors.** These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1992. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

Prior to 1992, this census also included one industry classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. This industry is covered in the 1992 Census of Financial, Insurance, and Real Estate Industries.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted

¹*Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during all or any part of 1992. The census of construction industries figures represent a summary of records for individual establishments rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1992 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1992 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1992 Census of Construction Industries were identified as part of an operation common to all 1992 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on nonemployers were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies. This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act (FICA) taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of

ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1992 Economic Census the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1992 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample. The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with 1991 administrative payroll of \$480,000 or more and a probability sample of single-establishment companies with payroll under that amount. Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 547,000 single-establishment employer companies initially classified as construction companies, 158,000 were included in the sample. All of the 11,000 establishments of multiestablishment companies were included in

the sample. There was a net increase in the sample of 48,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan area, or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1992 and 1987 data. Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1992 and 1987 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics. Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used. The relative standard error is a measure of sampling variability; i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

One such “nonsampling” issue was raised in the processing of the 1992 statistics. For 1992, a relatively small number of nonemployer records with revenues more than \$1 million were excluded from tabulations. The exclusion of these records resulted in a significant decrease in total nonemployer revenues from 1987, where no upper limit was used. The large revenues are now assumed to be unreasonable for firms without employees. It is also likely that these revenues are duplicated in revenues reported by (or imputed to) firms with paid employees. A comprehensive study of this issue is planned prior to the 1997 census.

CENSUS REPORT FORMS

Information for the 1992 Census of Construction Industries was obtained from employer establishments primarily through the use of 22 questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179. Establishments with 1991 administrative payroll of \$1,080,000 or more all received the standard form. For those sample establishments with payroll under that amount, half received the standard form and half received the short form. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and advisory groups.

Also, approximately 6,000 establishments in SIC's 1521, 1629, and 1799 were surveyed in the Census of Construction Industries 1989 Pretest. This survey consisted of four panels which received one of four experimental questionnaires and one panel which received the control questionnaire. Along with the questionnaire, these establishments received an evaluation questionnaire, which requested information about respondents' reactions to the questionnaire, problems in completing the questionnaire, and how long it took to complete the questionnaire. Results from the 1989 Pretest questionnaire are reflected as reworded questions, improved instructions, and restructured value of business questions in the 1992 questionnaires.

DATA PROCESSING

The 1992 census report forms were mailed out in December 1992. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, IN, where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1993.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1992 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical location of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

In 1987 and 1992, the “value of construction work” was collected to better measure actual construction activity done during the year. In 1992, this item was collected as a total of three separate items. These items (receipts from construction contract work, value of speculative construction work, and value of construction work done for own use) were collected separately to emphasize construction activity that had been poorly reported in previous censuses.

Receipts from the sale of land were not collected separately in 1992, as in 1987, but are still excluded from the value of construction work done.

All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added" avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added" is defined in the 1992 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

To discuss a special tabulation before submitting specifications, call 301-457-4680.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction

Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others and costs for materials, components, supplies, and fuels. In 1987, for SIC 1531, land receipts were collected as a component of dollar value of business and, therefore, were subtracted from this value. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	Legal form of organization by industry	Type of operation by industry
Employees:		
All employees—average number	1, 2	2
Establishments—number in business during year:		
All	1	
With payroll	1, 2	2
Without payroll	1	
Payroll, all employees	2	2
Proprietors and working partners:		
All establishments	1	
Establishments with payroll	1	
Establishments without payroll	1	
Dollar value of business done:		
All establishments	1	
Establishments with payroll	1	2
Establishments without payroll	1	
Value of construction work	2	2
Net value of construction work	2	2
Value added	2	2
Subcontract work to others, costs for	2	2

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SUMMARY OF FINDINGS

This subject report provides data by legal form of company organization and type of operation from the 1992 Census of Construction Industries covering construction establishments with payroll. In addition, limited data on construction establishments with no payroll during 1992, obtained from administrative records of the Federal Government, are also included. (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

As shown in table 1, there were 1.9 million construction establishments in the United States operating in the construction industries. These establishments accounted for \$582 billion in total value of business done.

Most of the 1.9 million construction establishments were individually owned. There were 1.5 million individual proprietorships, accounting for 76 percent of all construction establishments. However, these individual proprietorships accounted for only \$74.1 billion in total value of business done, or 13 percent of all establishments. Establishments classified as corporations accounted for 21 percent of all establishments and 84 percent of the total value of business done. Partnerships accounted for 3 percent of all establishments and 3 percent of the total value of business done. Establishments with other legal forms of organization and establishments which could not be classified accounted for the balance.

ESTABLISHMENTS WITH PAYROLL

Table 2 provides more detailed information for establishments with payroll. Selected statistics are shown by legal form of company organization and type of operation (single- or multiunit companies). (See Technical Notes for definitions.)

Total value of construction work for all construction establishments with payroll in 1992 amounted to \$528 billion. Establishments of multiunit companies accounted for only 2 percent of all establishments, but accounted for 21 percent of the total value of construction work. Establishments of single-unit companies accounted for 98 percent of the number of employer establishments and 79 percent of the total value of construction work.

There were 342,262 establishments that operated as corporations, accounting for 60 percent of all employer establishments. They had total value of construction work

of \$470 billion, 89 percent of the value of all establishments. There were 230,590 establishments, or 40 percent that operated as individual proprietorships, partnerships, and other forms of organization which could not be classified. They accounted for 11 percent of the total value of construction work. Of these unincorporated establishments, 205,250 were organized as individual proprietorships, and 22,896 were partnerships. Establishments with other legal forms of organization and establishments which could not be classified accounted for the balance.

Establishments of multiunit companies, on the average, were larger than those of single-unit companies. The average multiunit establishment had 69 employees and total value of construction work of \$10.5 million. The average single-unit establishment had only 7 employees and total value of construction work of \$741 thousand.

Establishments operating as corporations tended to be larger than those operating as partnerships or individual proprietorships. The average corporate establishment had 12 employees and total value of construction work of \$1.4 million. The average partnership establishment had 5 employees and total value of construction work of \$622 thousand. The average for individual proprietorships was approximately 3 employees and total value of construction work of \$203 thousand.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land were not collected separately but are still excluded from the value of construction work done. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability as well as errors of response and nonreporting. The relative standard errors shown in

the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1992, there were 1.3 million establishments with no payroll classified as construction. According to administrative records of the Federal Government, their value of

business done during 1992 was \$42.5 billion. By far, most of these establishments, about 93 percent, were individual proprietorships accounting for 75 percent of the total value of business done.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in table 1.

TECHNICAL NOTES

CENSUS DEFINITION OF COMPANY

The 1992 Census of Construction Industries was conducted as part of the 1992 Economic Censuses. A “company,” as defined in the economic censuses, is a business organization consisting of one establishment or more under common ownership or control. Each company was asked to report on all domestic operating establishments it owned or controlled (such as construction establishments, factories, mines, stores, sales offices, etc.) as well as its separate auxiliary activities (such as central offices, central warehouses, research and development laboratories, and other support functions within the company). All foreign activities of these companies, however, were excluded from census coverage. Each company was also asked to specify its legal form of organization (corporation, partnership, sole proprietorship, cooperative, etc.).

Through the “Company Organization Survey,” conducted annually, the Census Bureau determines which establishments are owned or controlled by multiestablishment companies. As a further aid in identifying establishments under common ownership or control, company affiliation inquiries appeared on questionnaires mailed in the 1992 Economic Censuses.

Therefore, a “company” consisted of all establishments specified by the reporting company to be under its ownership or control. If the owning or controlling company was a “parent” company having one subsidiary company or more, all establishments of its subsidiaries were also included in the census definition of “company.”

For purposes of this report, a “single-unit” company is defined as a company which owns or controls only one establishment. A “multiunit” company is a company which owns or controls two establishments or more, at least one of which comes within the scope of the economic censuses. Therefore, a company with two construction establishments or more would be classified as a “multiunit” company, as would a company with only one construction establishment if the company also owns or controls one establishment or more in other lines of activity.

The data in this report covering establishments with payroll were obtained from a sample survey. The user of these data also should keep in mind the definition of a construction establishment. Briefly stated, a “construction

establishment” is defined as a relatively permanent office or other place of business, where the usual business activities related to construction are conducted. Usually a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Separate reports were not required for each construction project or construction site.

LEGAL FORM OF ORGANIZATION

Each establishment with payroll covered in the 1992 Economic Censuses was classified into one of seven specified legal forms of organization. The seven classifications consisted of:

1. **Individual proprietorship**—Companies owned by one person.
2. **Partnership**—Companies owned by two persons or more, each of whom had a financial interest in the business.
3. **Corporation**—Companies (other than cooperatives) that were legally incorporated under State laws.
4. **Cooperative association (taxable)**—Companies owned by an association of customers, whether or not they were incorporated.
5. **Cooperative association (tax-exempt)**—Companies owned by an association of customers, whether or not they were incorporated.
6. **Government**—Companies operated by or under the control of a government entity or a board of directors either appointed by such an entity or publicly elected.
7. **Other legal forms**—Companies whose legal form of organization was not one of those defined above. Included in this miscellaneous group were estates and receiverships.

Establishments without payroll were classified into specified legal forms of organization according to the type of income tax form filed (1040C—individual proprietorship; 1065—partnership; 1120 and 1120S—corporation).

Table 1. Summary Statistics for Establishments With and Without Payroll by Legal Form of Organization for Industry Groups and Industries: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Industry group, industry, and legal form of organization	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number ¹	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done ²	Number	Proprietors and working partners ³	All employees**	Dollar value of business done		
	A	B	C	D	E	F	G	H	I	J	K	J	K
CONSTRUCTION INDUSTRIES (SIC 15, 16, 17)													
All establishments -----	1 922 631	1 569 215	4 668 280	581 630 401	1 349 780	1 318 174	42 545 744	572 851	251 041	4 668 280	539 084 657	(Z)	(Z)
Corporations -----	402 427	—	3 970 033	487 457 074	60 165	—	7 514 343	342 262	—	3 970 033	479 942 731	(Z)	(Z)
Individual proprietorships -----	1 466 306	1 466 306	563 801	74 120 893	1 261 056	1 261 056	31 888 665	205 250	205 250	563 801	42 232 228	1	1
Partnerships -----	51 455	102 909	115 552	17 720 511	28 559	57 118	3 142 736	22 896	45 791	115 552	14 577 775	1	1
Other ⁴ -----	2 444	—	18 894	2 331 923	—	—	—	2 444	—	18 894	2 331 923	2	1
Building Construction— General Contractors and Operative Builders (SIC 15)													
All establishments -----	395 043	277 129	1 096 859	236 462 718	226 636	206 080	16 231 503	168 407	71 049	1 096 859	220 231 215	(Z)	(Z)
Corporations -----	134 139	—	912 060	201 868 181	30 544	—	4 926 293	103 595	—	912 060	196 941 888	(Z)	(Z)
Individual proprietorships -----	242 842	242 842	143 159	24 826 898	186 104	186 104	9 754 046	56 738	56 738	143 159	15 072 852	1	1
Partnerships -----	17 143	34 287	36 243	8 788 397	9 988	19 976	1 551 164	7 155	14 311	36 243	7 237 233	2	2
Other ⁴ -----	919	—	5 398	979 242	—	—	—	919	—	5 398	979 242	4	3
General contractors— Residential buildings (SIC 152)													
All establishments -----	295 870	219 339	452 557	71 578 639	181 884	162 904	14 155 785	113 986	56 435	452 557	57 422 854	1	1
Corporations -----	90 544	—	321 141	48 708 673	28 567	—	4 608 630	61 977	—	321 141	44 100 043	1	1
Individual proprietorships -----	189 834	189 834	111 196	18 952 629	143 730	143 730	8 079 828	46 104	46 104	111 196	10 872 801	1	2
Partnerships -----	14 753	29 505	16 897	3 613 748	9 587	19 174	1 467 327	5 166	10 331	16 897	2 146 421	4	4
Other ⁴ -----	739	—	(S)	(S)	—	—	—	739	—	(S)	(S)	(S)	(S)
Operative builders (SIC 153)													
All establishments -----	45 076	31 944	114 194	47 452 859	28 087	27 171	1 325 148	16 989	4 773	114 194	46 127 711	1	1
Corporations -----	14 274	—	98 479	41 438 062	1 261	—	230 745	13 013	—	98 479	41 207 317	1	1
Individual proprietorships -----	29 555	29 555	6 576	2 571 046	26 481	26 481	1 020 299	3 074	3 074	6 576	1 550 747	5	6
Partnerships -----	1 195	2 389	8 154	2 940 031	345	690	74 104	850	1 699	8 154	2 865 927	2	3
Other ⁴ -----	53	—	985	503 720	—	—	—	53	—	985	503 720	6	1
General building contractors— Nonresidential buildings (SIC 154)													
All establishments -----	54 097	25 845	530 108	117 431 220	16 665	16 005	750 570	37 432	9 840	530 108	116 680 650	(Z)	(Z)
Corporations -----	29 321	—	492 440	111 721 446	716	—	86 918	28 605	—	492 440	111 634 528	(Z)	(Z)
Individual proprietorships -----	23 453	23 453	25 388	3 303 223	15 893	15 893	653 919	7 560	7 560	25 388	2 649 304	3	3
Partnerships -----	1 196	2 393	11 191	2 234 618	56	112	9 733	1 140	2 281	11 191	2 224 885	4	3
Other ⁴ -----	127	—	(S)	(S)	—	—	—	127	—	(S)	(S)	(S)	(S)
Heavy Construction Other than Building Construction— Contractors (SIC 16)													
All establishments -----	59 464	32 569	799 422	99 319 134	22 284	21 072	790 952	37 180	11 497	799 422	98 528 182	(Z)	(Z)
Corporations -----	28 912	—	745 098	92 551 567	1 921	—	188 089	26 991	—	745 098	92 363 478	(Z)	(Z)
Individual proprietorships -----	28 147	28 147	30 651	3 041 028	19 654	19 654	521 751	8 493	8 493	30 651	2 519 277	3	3
Partnerships -----	2 211	4 423	20 105	3 128 857	709	1 418	81 112	1 502	3 005	20 105	3 047 745	2	2
Other ⁴ -----	195	—	3 568	597 682	—	—	—	195	—	3 568	597 682	2	1
Highway and street construction contractors (SIC 161)													
All establishments -----	15 000	7 501	257 356	36 809 447	4 910	4 825	163 613	10 090	2 676	257 356	36 645 834	(Z)	(Z)
Corporations -----	7 988	—	242 601	34 918 886	227	—	24 047	7 761	—	242 601	34 894 839	(Z)	(Z)
Individual proprietorships -----	6 375	6 375	8 213	818 404	4 541	4 541	123 543	1 834	1 834	8 213	694 861	5	5
Partnerships -----	563	1 126	5 856	960 522	142	284	16 023	421	842	5 856	944 499	3	3
Other ⁴ -----	74	—	686	111 635	—	—	—	74	—	686	111 635	7	1
Heavy construction contractors—Except highway and street (SIC 162)													
All establishments -----	44 464	25 068	542 066	62 509 687	17 374	16 247	627 339	27 090	8 821	542 066	61 882 348	(Z)	(Z)
Corporations -----	20 923	—	502 497	57 632 680	1 694	—	164 042	19 229	—	502 497	57 468 638	(Z)	(Z)
Individual proprietorships -----	21 771	21 771	22 437	2 222 624	15 113	15 113	398 208	6 658	6 658	22 437	1 824 416	3	3
Partnerships -----	1 648	3 297	14 250	2 168 335	567	1 134	65 089	1 081	2 163	14 250	2 103 246	3	3
Other ⁴ -----	121	—	2 882	486 047	—	—	—	121	—	2 882	486 047	2	1

See footnotes at end of table.

Table 1. Summary Statistics for Establishments With and Without Payroll by Legal Form of Organization for Industry Groups and Industries: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Industry group, industry, and legal form of organization	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number ¹	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done ²	Number	Proprietors and working partners ³	All employees**	Dollar value of business done		
	A	B	C	D	E	F	G	H	I	J	K	J	K
CONSTRUCTION INDUSTRIES (SIC 15, 16, 17)—Con.													
Special Trade Contractors (SIC 17)													
All establishments -----	1 468 123	1 259 517	2 771 999	245 848 549	1 100 860	1 091 022	25 523 289	367 263	168 495	2 771 999	220 325 260	(Z)	(Z)
Corporations -----	239 376	—	2 312 875	193 037 327	27 700	—	2 399 961	211 676	—	2 312 875	190 637 366	(Z)	(Z)
Individual proprietorships -----	1 195 317	1 195 317	389 991	46 252 967	1 055 298	1 055 298	21 612 868	140 019	140 019	389 991	24 640 099	1	1
Partnerships -----	32 100	64 200	59 204	5 803 257	17 862	35 724	1 510 460	14 238	28 476	59 204	4 292 797	2	2
Other ⁴ -----	1 330	—	9 928	754 999	—	—	—	1 330	—	9 928	754 999	2	1
Plumbing, heating, and air-conditioning (SIC 171)													
All establishments -----	168 663	119 985	612 516	60 752 005	93 268	91 391	3 084 024	75 395	28 594	612 516	57 667 981	(Z)	(Z)
Corporations -----	52 651	—	541 825	52 130 318	3 880	—	334 313	48 771	—	541 825	51 796 005	(Z)	(Z)
Individual proprietorships -----	111 785	111 785	60 504	7 481 916	87 385	87 385	2 544 948	24 400	24 400	60 504	4 936 968	2	2
Partnerships -----	4 100	8 199	8 676	1 004 394	2 003	4 006	204 763	2 097	4 193	8 676	799 631	6	5
Other ⁴ -----	128	—	1 511	135 378	—	—	—	128	—	1 511	135 378	5	4
Painting and paper hanging (SIC 172)													
All establishments -----	207 594	197 264	162 587	11 514 299	175 674	177 264	2 774 525	31 920	20 000	162 587	8 739 774	1	1
Corporations -----	14 275	—	112 866	6 527 206	916	—	60 209	13 359	—	112 866	6 466 997	1	1
Individual proprietorships -----	189 148	189 148	44 206	4 564 894	172 252	172 252	2 565 238	16 896	16 896	44 206	1 999 656	2	2
Partnerships -----	4 058	8 116	5 074	405 931	2 506	5 012	149 078	1 552	3 104	5 074	256 853	7	7
Other ⁴ -----	113	—	441	16 269	—	—	—	113	—	441	16 269	15	15
Electrical work (SIC 173)													
All establishments -----	135 087	96 728	487 072	42 555 710	81 065	78 697	1 828 669	54 022	18 031	487 072	40 727 041	(Z)	(Z)
Corporations -----	40 564	—	437 708	37 384 426	3 603	—	203 638	36 961	—	437 708	37 180 788	(Z)	(Z)
Individual proprietorships -----	92 031	92 031	41 215	4 639 950	76 227	76 227	1 525 065	15 804	15 804	41 215	2 944 417	2	2
Partnerships -----	2 348	4 696	5 264	529 658	1 235	2 470	99 966	1 113	2 226	5 264	429 692	6	6
Other ⁴ -----	144	—	2 884	172 144	—	—	—	144	—	2 884	172 144	2	2
Masonry, stonework, tile setting, and plastering (SIC 174)													
All establishments -----	149 736	129 532	388 573	27 389 802	101 952	102 733	2 181 396	47 784	26 799	388 573	25 208 406	(Z)	(Z)
Corporations -----	24 507	—	302 915	20 808 580	1 001	—	89 809	23 506	—	302 915	20 718 771	1	1
Individual proprietorships -----	120 715	120 715	72 157	5 639 950	99 169	99 169	1 922 513	21 546	21 546	72 157	3 717 437	2	2
Partnerships -----	4 409	8 817	12 943	909 594	1 782	3 564	169 074	2 627	5 253	12 943	740 520	5	4
Other ⁴ -----	105	—	558	31 678	—	—	—	105	—	558	31 678	10	9
Carpentry and floor work (SIC 175)													
All establishments -----	405 695	388 503	226 549	24 577 849	357 289	359 177	7 006 339	48 406	29 326	226 549	17 571 510	1	1
Corporations -----	22 597	—	154 436	13 066 018	1 299	—	111 689	21 298	—	154 436	12 954 329	1	1
Individual proprietorships -----	377 354	377 354	63 023	10 602 771	352 803	352 803	6 619 704	24 551	24 551	63 023	3 983 067	2	2
Partnerships -----	5 575	11 149	8 487	870 321	3 187	6 374	274 946	2 388	4 775	8 487	595 375	5	5
Other ⁴ -----	169	—	(S)	(S)	—	—	—	169	—	(S)	(S)	(S)	(S)
Roofing, siding, and sheet metal work (SIC 176)													
All establishments -----	91 300	76 821	215 545	18 567 644	63 731	64 333	1 593 033	27 569	12 488	215 545	16 974 611	1	1
Corporations -----	16 684	—	180 177	14 798 758	694	—	76 237	15 990	—	180 177	14 722 521	1	1
Individual proprietorships -----	72 069	72 069	30 524	3 300 261	61 741	61 741	1 395 632	10 328	10 328	30 524	1 904 629	3	3
Partnerships -----	2 376	4 751	4 482	441 278	1 296	2 592	121 164	1 080	2 159	4 482	320 114	8	9
Other ⁴ -----	171	—	(S)	(S)	—	—	—	171	—	(S)	(S)	(S)	(S)

See footnotes at end of table.

6 LEGAL FORM OF ORGANIZATION

CONSTRUCTION—SUBJECT SERIES

Table 1. Summary Statistics for Establishments With and Without Payroll by Legal Form of Organization for Industry Groups and Industries: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Industry group, industry, and legal form of organization	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number ¹	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done ²	Number	Proprietors and working partners ³	All employees**	Dollar value of business done		
	A	B	C	D	E	F	G	H	I	J	K	J	K
CONSTRUCTION INDUSTRIES (SIC 15, 16, 17)—Con.													
Special Trade Contractors (SIC 17)—Con.													
Concrete work (SIC 177)													
All establishments -----	54 875	42 055	192 539	15 256 182	28 752	28 911	660 147	26 123	13 144	192 539	14 596 035	1	1
Corporations -----	14 669	—	151 285	12 051 780	514	—	51 245	14 155	—	151 285	12 000 535	1	1
Individual proprietorships -----	38 165	38 165	35 166	2 715 300	27 565	27 565	554 532	10 600	10 600	35 166	2 160 768	2	3
Partnerships -----	1 945	3 890	5 745	471 968	673	1 346	54 370	1 272	2 544	5 745	417 598	7	7
Other ⁴ -----	95	—	(S)	(S)	—	—	—	95	—	(S)	(S)	(S)	(S)
Water well drilling (SIC 178)													
All establishments -----	5 113	3 355	19 346	1 832 037	1 475	1 604	80 747	3 638	1 751	19 346	1 751 290	2	2
Corporations -----	2 145	—	15 689	1 416 400	62	—	4 362	2 083	—	15 689	1 412 038	2	2
Individual proprietorships -----	2 569	2 569	3 022	320 212	1 222	1 222	54 719	1 347	1 347	3 022	265 493	6	6
Partnerships -----	393	786	617	93 764	191	382	21 666	202	404	617	72 098	14	13
Other ⁴ -----	7	—	(S)	(S)	—	—	—	7	—	(S)	(S)	(S)	(S)
Miscellaneous special trade contractors (SIC 179)													
All establishments -----	250 059	205 276	467 272	43 403 020	197 654	186 912	6 314 409	52 405	18 364	467 272	37 088 611	(Z)	(Z)
Corporations -----	51 284	—	415 974	34 853 841	15 731	—	1 468 459	35 553	—	415 974	33 385 382	(Z)	(Z)
Individual proprietorships -----	191 481	191 481	40 174	7 158 182	176 934	176 934	4 430 517	14 547	14 547	40 174	2 727 665	2	2
Partnerships -----	6 897	13 795	7 915	1 076 349	4 989	9 978	415 433	1 908	3 817	7 915	660 916	5	5
Other ⁴ -----	397	—	3 208	314 648	—	—	—	397	—	3 208	314 648	3	1

¹Number of establishments in this table represent those in business at any time during the year.

²For 1992, nonemployer records showing revenues greater than \$1 million were excluded. See Introduction text.

³Data are revised from previously issued final industry reports.

⁴Includes establishments with other noncorporate forms of organization plus establishments for which information available did not permit classification by legal form of organization.

Table 2. Selected Statistics for Establishments With Payroll by Industry, Legal Form of Organization, and Type of Operation: 1992

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Item	Number of establishments [†]	All employees ^{**}	Payroll, all employees	Value of construction work	Cost of construction work sub-contracted to others	Net value of construction work [†]	Value added ^{††}	Relative standard error of estimate (percent) for column—		
	A	B	C	D	E	F	G	B	D	F
CONSTRUCTION INDUSTRIES (SIC 15, 16, 17)										
Legal form of organization and type of operation:										
All establishments	572 851	4 668 280	117 729 651	528 105 847	136 915 956	391 189 891	234 617 817	(Z)	(Z)	(Z)
Corporations	342 262	3 970 033	106 522 857	469 939 986	126 872 582	343 067 404	206 556 085	(Z)	(Z)	(Z)
Individual proprietorships	205 250	563 801	8 397 635	41 653 567	5 681 666	35 971 901	20 697 959	1	1	1
Partnerships	22 896	115 552	2 393 575	14 240 190	3 808 804	10 431 386	6 263 748	1	1	1
Other ²	2 444	18 894	415 585	2 272 105	552 905	1 719 199	1 100 026	2	1	1
Establishments of multiunit companies	10 633	730 956	23 464 334	111 537 459	35 853 749	75 683 710	47 634 001	(Z)	(Z)	(Z)
Establishments of single-unit companies	562 218	3 937 324	94 265 318	416 568 388	101 062 207	315 506 181	186 983 817	(Z)	(Z)	(Z)
Building Construction—General Contractors and Operative Builders (SIC 15)										
Legal form of organization and type of operation:										
All establishments	168 407	1 096 859	27 077 574	215 628 967	100 906 815	114 722 152	63 116 790	(Z)	(Z)	(Z)
Corporations	103 595	912 060	24 145 969	192 797 480	93 675 770	99 121 710	54 694 354	(Z)	(Z)	(Z)
Individual proprietorships	56 738	143 159	2 090 067	14 828 902	4 025 600	10 803 302	5 591 784	1	1	1
Partnerships	7 155	36 243	748 400	7 044 623	2 833 109	4 211 514	2 466 162	2	2	2
Other ²	919	5 398	93 137	957 962	372 335	585 627	364 490	4	3	2
Establishments of multiunit companies	2 572	150 703	4 878 113	46 645 995	25 704 177	20 941 818	11 603 382	(Z)	(Z)	(Z)
Establishments of single-unit companies	165 835	946 156	22 199 461	168 982 972	75 202 639	93 780 333	51 513 408	(Z)	(Z)	(Z)
General building contractors—Residential buildings (SIC 152)										
Legal form of organization and type of operation:										
All establishments	113 986	452 557	8 438 452	56 468 287	18 470 146	37 998 141	19 636 680	1	1	1
Corporations	61 977	321 141	6 549 143	43 321 371	15 110 967	28 210 404	14 562 889	1	1	1
Individual proprietorships	46 104	111 196	1 568 881	10 729 277	2 680 889	8 048 388	4 133 713	1	2	1
Partnerships	5 166	16 897	278 306	2 119 018	602 018	1 516 999	816 835	4	4	4
Other ²	739	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Establishments of multiunit companies	639	21 560	519 158	3 538 029	1 397 320	2 140 709	1 228 341	1	1	(Z)
Establishments of single-unit companies	113 347	430 997	7 919 294	52 930 257	17 072 825	35 857 432	18 408 339	1	1	1
General contractors—Single-family houses (SIC 1521)										
Legal form of organization and type of operation:										
All establishments	107 495	403 754	7 277 890	48 633 331	14 973 107	33 660 224	17 183 012	1	1	1
Corporations	57 756	280 179	5 522 310	36 305 881	11 859 046	24 446 835	12 449 860	1	1	1
Individual proprietorships	44 199	105 518	1 475 417	10 211 768	2 549 467	7 662 301	3 911 249	1	2	2
Partnerships	4 841	15 492	247 910	1 897 532	510 423	1 387 110	729 782	4	4	4
Other ²	700	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Establishments of multiunit companies	495	14 726	305 771	2 081 624	690 424	1 391 200	793 559	1	1	1
Establishments of single-unit companies	107 000	389 028	6 972 119	46 551 707	14 282 683	32 269 023	16 389 452	1	1	1
General contractors—Residential buildings other than single-family (SIC 1522)										
Legal form of organization and type of operation:										
All establishments	6 490	48 803	1 160 562	7 834 956	3 497 038	4 337 918	2 453 669	2	2	2
Corporations	4 222	40 961	1 026 833	7 015 491	3 251 921	3 763 570	2 113 029	2	2	2
Individual proprietorships	1 905	5 678	93 464	517 510	131 422	386 088	222 463	7	7	7
Partnerships	325	1 405	30 396	221 485	91 596	129 889	87 054	12	14	11
Other ²	39	759	9 869	80 470	22 099	58 371	31 123	3	4	3
Establishments of multiunit companies	144	6 834	213 387	1 456 405	706 896	749 509	434 782	(Z)	(Z)	(Z)
Establishments of single-unit companies	6 346	41 969	947 175	6 378 551	2 790 142	3 588 409	2 018 887	2	2	2
Operative builders (SIC 1531)										
Legal form of organization and type of operation:										
All establishments	16 989	114 194	3 358 753	44 588 033	17 744 712	26 843 321	15 288 760	1	1	1
Corporations	13 013	98 479	3 031 199	39 863 868	16 072 958	23 790 910	13 514 297	1	1	1
Individual proprietorships	3 074	6 576	106 735	1 497 817	456 401	1 041 416	507 579	5	6	6
Partnerships	850	8 154	193 288	2 737 971	1 003 670	1 734 301	1 074 130	2	3	4
Other ²	53	985	27 532	488 377	211 684	276 693	192 755	6	1	1
Establishments of multiunit companies	616	24 124	830 199	11 794 433	5 124 279	6 670 154	4 140 459	(Z)	(Z)	(Z)
Establishments of single-unit companies	16 373	90 071	2 528 554	32 793 600	12 620 433	20 173 167	11 148 301	1	1	1
General contractors—Nonresidential buildings (SIC 154)										
Legal form of organization and type of operation:										
All establishments	37 432	530 108	15 280 369	114 572 647	64 691 957	49 880 690	28 191 349	(Z)	(Z)	(Z)
Corporations	28 605	492 440	14 565 627	109 612 241	62 491 846	47 120 395	26 617 168	(Z)	(Z)	(Z)
Individual proprietorships	7 560	25 388	414 452	2 601 807	888 310	1 713 497	950 493	3	3	3
Partnerships	1 140	11 191	276 806	2 187 635	1 227 421	960 214	575 197	4	3	3
Other ²	127	(S)	(S)	(S)	84 381	(S)	(S)	(S)	(S)	(S)
Establishments of multiunit companies	1 317	105 020	3 528 756	31 313 533	19 182 577	12 130 955	6 234 582	(Z)	(Z)	(Z)
Establishments of single-unit companies	36 115	425 089	11 751 613	83 259 115	45 509 380	37 749 735	21 956 768	1	(Z)	(Z)
General contractors—Industrial buildings and warehouses (SIC 1541)										
Legal form of organization and type of operation:										
All establishments	7 693	122 970	3 476 400	20 585 807	9 618 518	10 967 289	6 437 735	1	1	1
Corporations	5 970	114 144	3 314 733	19 692 904	9 303 385	10 389 519	6 079 438	1	1	1
Individual proprietorships	1 473	5 946	92 078	500 044	141 275	358 769	209 470	7	7	7
Partnerships	235	2 692	65 220	371 951	165 813	206 139	141 052	7	5	6
Other ²	14	189	4 369	20 908	(S)	12 862	7 774	17	23	17
Establishments of multiunit companies	260	25 517	869 517	4 636 874	1 996 562	2 640 312	1 614 424	(Z)	(Z)	(Z)
Establishments of single-unit companies	7 433	97 453	2 606 883	15 948 933	7 621 956	8 326 977	4 823 311	2	1	1

See footnotes at end of table.

8 LEGAL FORM OF ORGANIZATION

CONSTRUCTION—SUBJECT SERIES

Table 2. Selected Statistics for Establishments With Payroll by Industry, Legal Form of Organization, and Type of Operation: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Item	Number of establishments [†]	All employees ^{**}	Payroll, all employees	Value of construction work	Cost of construction work sub-contracted to others	Net value of construction work [†]	Value added ^{††}	Relative standard error of estimate (percent) for column—		
	A	B	C	D	E	F	G	B	D	F
CONSTRUCTION INDUSTRIES (SIC 15, 16, 17)—Con.										
Building Construction—General Contractors and Operative Builders (SIC 15)—Con.										
General contractors—Nonresidential buildings, n.e.c. (SIC 1542)										
Legal form of organization and type of operation:										
All establishments	29 739	407 138	11 803 969	93 986 840	55 073 439	38 913 401	21 753 615	(Z)	(Z)	(Z)
Corporations	22 635	378 296	11 250 895	89 919 336	53 188 461	36 730 876	20 537 730	(Z)	(Z)	(Z)
Individual proprietorships	6 086	19 442	322 374	2 101 764	747 035	1 354 728	741 022	4	4	4
Partnerships	905	8 500	211 586	1 815 684	1 061 608	754 076	434 145	4	3	4
Other ²	113	(S)	(S)	(S)	76 335	(S)	(S)	(S)	(S)	(S)
Establishments of multiunit companies	1 057	79 503	2 659 239	26 676 659	17 186 015	9 490 643	4 620 158	(Z)	(Z)	(Z)
Establishments of single-unit companies	28 682	327 635	9 144 730	67 310 182	37 887 424	29 422 758	17 133 457	1	(Z)	1
Heavy Construction Other than Building Construction—Contractors (SIC 16)										
Legal form of organization and type of operation:										
All establishments	37 180	799 422	23 728 285	95 571 457	18 045 349	77 526 108	49 165 312	(Z)	(Z)	(Z)
Corporations	26 991	745 098	22 480 895	89 540 269	17 003 177	72 537 092	45 955 504	(Z)	(Z)	(Z)
Individual proprietorships	8 493	30 651	522 981	2 472 207	217 709	2 254 497	1 470 644	3	3	3
Partnerships	1 502	20 105	617 025	2 973 582	696 063	2 277 519	1 426 542	2	2	2
Other ²	195	3 568	107 384	585 399	128 399	457 000	312 623	2	1	1
Establishments of multiunit companies	2 025	273 222	9 046 708	34 802 419	7 108 139	27 694 280	18 140 364	(Z)	(Z)	(Z)
Establishments of single-unit companies	35 156	526 200	14 681 577	60 769 038	10 937 210	49 831 828	31 024 948	(Z)	(Z)	(Z)
Highway and street construction contractors (SIC 1611)										
Legal form of organization and type of operation:										
All establishments	10 090	257 356	7 357 719	35 331 607	7 468 636	27 862 971	15 710 659	(Z)	(Z)	(Z)
Corporations	7 761	242 601	7 036 541	33 639 390	7 135 051	26 504 339	14 941 035	(Z)	(Z)	(Z)
Individual proprietorships	1 834	8 213	137 180	683 566	(D)	(D)	372 470	5	5	(D)
Partnerships	421	5 856	161 628	897 144	241 271	655 873	357 943	3	3	3
Other ²	74	686	22 370	111 507	(D)	(D)	39 211	7	1	(D)
Establishments of multiunit companies	804	72 937	2 128 884	11 588 687	2 727 672	8 861 015	4 609 014	(Z)	(Z)	(Z)
Establishments of single-unit companies	9 286	184 419	5 228 835	23 742 920	4 740 964	19 001 956	11 101 645	1	(Z)	1
Heavy construction contractors—Except highway and street (SIC 162)										
Legal form of organization and type of operation:										
All establishments	27 090	542 066	16 370 565	60 239 849	10 576 713	49 663 137	33 454 653	(Z)	(Z)	(Z)
Corporations	19 229	502 497	15 444 353	55 900 879	9 868 126	46 032 753	31 014 469	(Z)	(Z)	(Z)
Individual proprietorships	6 658	22 437	385 801	1 788 640	(D)	(D)	1 098 174	3	3	(D)
Partnerships	1 081	14 250	455 397	2 076 438	454 792	1 621 646	1 068 599	3	3	3
Other ²	121	2 882	85 014	473 892	(D)	(D)	273 412	2	1	(D)
Establishments of multiunit companies	1 221	200 285	6 917 824	23 213 732	4 380 467	18 833 265	13 531 350	(Z)	(Z)	(Z)
Establishments of single-unit companies	25 869	341 781	9 452 742	37 026 118	6 196 246	30 829 872	19 923 303	(Z)	(Z)	(Z)
Bridge, tunnel, and elevated highway contractors (SIC 1622)										
Legal form of organization and type of operation:										
All establishments	1 041	43 701	1 485 491	7 198 275	1 882 325	5 315 950	3 078 306	1	1	1
Corporations	922	40 040	1 351 147	6 518 676	1 734 872	4 783 804	2 741 979	1	(Z)	(Z)
Individual proprietorships	48	272	5 010	(D)	(D)	(D)	13 021	21	(D)	(D)
Partnerships	66	3 221	126 505	643 219	141 335	501 884	317 221	4	7	8
Other ²	5	169	2 830	(D)	(D)	(D)	6 085	(Z)	(D)	(D)
Establishments of multiunit companies	116	14 389	532 450	2 672 397	670 156	2 002 241	1 126 943	(Z)	(Z)	(Z)
Establishments of single-unit companies	925	29 312	953 041	4 525 878	1 212 169	3 313 709	1 951 363	1	1	1
Water, sewer, pipeline, communication and powerline contractors (SIC 1623)										
Legal form of organization and type of operation:										
All establishments	10 233	194 252	5 624 369	20 205 048	2 617 685	17 587 363	11 734 058	1	1	(Z)
Corporations	7 933	181 626	5 347 069	18 898 227	2 459 454	16 438 773	10 969 950	1	1	(Z)
Individual proprietorships	1 900	7 913	144 210	(D)	(D)	614 764	408 230	6	(D)	6
Partnerships	359	3 933	117 816	579 731	97 679	482 052	318 506	6	4	5
Other ²	41	779	15 274	(D)	(D)	51 774	37 373	4	(Z)	7
Establishments of multiunit companies	440	35 550	1 197 274	3 894 208	519 796	3 374 412	2 550 560	(Z)	(Z)	(Z)
Establishments of single-unit companies	9 793	158 702	4 427 095	16 310 840	2 097 889	14 212 951	9 183 498	1	1	1

See footnotes at end of table.

Table 2. Selected Statistics for Establishments With Payroll by Industry, Legal Form of Organization, and Type of Operation: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Item	Number of establishments ¹	All employees ²	Payroll, all employees	Value of construction work	Cost of construction work sub-contracted to others	Net value of construction work ³	Value added ⁴	Relative standard error of estimate (percent) for column—		
	A	B	C	D	E	F	G	B	D	F
CONSTRUCTION INDUSTRIES (SIC 15, 16, 17)—Con.										
Heavy Construction Other than Building Construction—Contractors (SIC 16)—Con.										
Heavy construction contractors, n.e.c. (SIC 1629)										
Legal form of organization and type of operation:										
All establishments	15 816	304 113	9 260 705	32 836 527	6 076 703	26 759 824	18 642 289	(Z)	(Z)	(Z)
Corporations	10 374	280 831	8 746 138	30 483 976	5 673 800	24 810 175	17 302 540	(Z)	(Z)	(Z)
Individual proprietorships	4 711	14 253	236 582	1 092 452	(D)	(D)	676 924	4	4	(D)
Partnerships	656	7 096	211 076	853 488	215 777	637 710	432 872	4	4	4
Other ²	75	1 934	66 910	406 611	(D)	(D)	229 954	3	1	(D)
Establishments of multiunit companies	665	150 346	5 188 100	16 647 127	3 190 515	13 456 612	9 853 847	(Z)	(Z)	(Z)
Establishments of single-unit companies	15 152	153 767	4 072 606	16 189 400	2 886 188	13 303 212	8 788 442	1	1	1
Special Trade Contractors (SIC 17)										
Legal form of organization and type of operation:										
All establishments	367 263	2 771 999	66 923 793	216 905 423	17 963 792	198 941 631	122 335 715	(Z)	(Z)	(Z)
Corporations	211 676	2 312 875	59 895 993	187 602 237	16 193 634	171 408 602	105 906 227	(Z)	(Z)	(Z)
Individual proprietorships	140 019	389 991	5 784 586	24 352 458	1 438 556	22 914 102	13 635 531	1	1	1
Partnerships	14 238	59 204	1 028 150	4 221 985	279 331	3 942 354	2 371 044	2	2	2
Other ²	1 330	9 928	215 064	728 743	52 171	676 573	422 913	2	1	1
Establishments of multiunit companies	6 037	307 031	9 539 513	30 089 045	3 041 434	27 047 611	17 890 254	(Z)	(Z)	(Z)
Establishments of single-unit companies	361 227	2 464 968	57 384 280	186 816 378	14 922 359	171 894 020	104 445 461	(Z)	(Z)	(Z)
Plumbing, heating, and air-conditioning (SIC 1711)										
Legal form of organization and type of operation:										
All establishments	75 395	612 516	16 613 239	56 902 406	6 146 698	50 755 709	29 431 529	(Z)	(Z)	(Z)
Corporations	48 771	541 825	15 400 327	51 117 702	5 867 005	45 250 697	26 463 717	(Z)	(Z)	(Z)
Individual proprietorships	24 400	60 504	994 689	4 863 639	193 431	4 670 209	2 498 662	2	2	2
Partnerships	2 097	8 676	167 396	786 154	70 601	715 554	384 613	6	5	5
Other ²	128	1 511	50 827	134 911	15 661	119 249	84 537	5	4	4
Establishments of multiunit companies	1 225	72 740	2 629 199	8 841 280	1 493 414	7 347 867	4 621 699	(Z)	(Z)	(Z)
Establishments of single-unit companies	74 171	539 777	13 984 039	48 061 126	4 653 284	43 407 842	24 809 830	(Z)	(Z)	(Z)
Painting and paper hanging (SIC 1721)										
Legal form of organization and type of operation:										
All establishments	31 920	162 587	3 164 065	8 689 828	595 079	8 094 749	5 854 779	1	1	1
Corporations	13 359	112 866	2 484 187	6 424 766	467 702	5 957 064	4 332 373	1	1	1
Individual proprietorships	16 896	44 206	600 834	1 993 267	113 758	1 879 509	1 335 430	2	2	2
Partnerships	1 552	5 074	73 626	255 601	12 877	242 723	175 292	7	7	7
Other ²	113	441	5 418	16 194	*742	15 452	11 683	15	15	15
Establishments of multiunit companies	167	7 324	172 183	462 150	31 189	430 961	326 782	1	1	1
Establishments of single-unit companies	31 753	155 263	2 991 882	8 227 678	563 890	7 663 788	5 527 997	1	1	1
Electrical work (SIC 1731)										
Legal form of organization and type of operation:										
All establishments	54 022	487 072	13 623 816	40 259 410	1 718 391	38 541 019	23 548 293	(Z)	(Z)	(Z)
Corporations	36 961	437 708	12 748 017	36 751 443	1 609 828	35 141 614	21 602 127	(Z)	(Z)	(Z)
Individual proprietorships	15 804	41 215	708 766	2 915 024	78 998	2 836 025	1 605 213	2	2	2
Partnerships	1 113	5 264	115 497	422 991	25 278	397 713	239 768	6	6	6
Other ²	144	2 884	51 536	169 952	4 287	165 666	101 185	2	2	2
Establishments of multiunit companies	943	65 858	2 227 284	6 674 320	368 599	6 305 721	4 119 582	(Z)	(Z)	(Z)
Establishments of single-unit companies	53 079	421 214	11 396 532	33 585 090	1 349 792	32 235 298	19 428 711	(Z)	(Z)	(Z)
Masonry, stonework, tile setting, and plastering (SIC 174)										
Legal form of organization and type of operation:										
All establishments	47 784	388 573	8 567 389	24 952 279	1 849 656	23 102 623	14 647 325	(Z)	(Z)	(Z)
Corporations	23 506	302 915	7 316 593	20 481 594	1 556 301	18 925 293	12 040 683	1	1	1
Individual proprietorships	21 546	72 157	1 033 077	3 700 957	247 312	3 453 644	2 154 072	2	2	2
Partnerships	2 627	12 943	208 006	738 353	43 949	694 404	435 879	5	4	4
Other ²	105	558	9 713	31 375	2 093	29 281	16 691	10	9	9
Establishments of multiunit companies	636	33 355	908 031	2 646 724	168 767	2 477 957	1 569 179	(Z)	(Z)	(Z)
Establishments of single-unit companies	47 148	355 219	7 659 358	22 305 555	1 680 889	20 624 666	13 078 146	1	1	(Z)
Masonry, stone setting, and other stonework (SIC 1741)										
Legal form of organization and type of operation:										
All establishments	22 637	147 892	2 882 520	8 457 864	501 955	7 955 909	5 146 139	1	1	1
Corporations	9 434	103 677	2 297 682	6 428 969	412 516	6 016 453	3 903 677	1	1	1
Individual proprietorships	11 697	37 797	494 147	1 707 888	79 185	1 628 703	1 042 367	2	2	2
Partnerships	1 462	6 123	86 258	308 082	9 973	298 108	192 665	7	6	6
Other ²	44	296	4 434	12 926	281	12 645	7 429	13	15	16
Establishments of multiunit companies	152	9 387	221 421	651 776	32 087	619 689	404 678	(Z)	(Z)	(Z)
Establishments of single-unit companies	22 485	138 505	2 661 099	7 806 088	469 868	7 336 220	4 741 461	1	1	1

See footnotes at end of table.

10 LEGAL FORM OF ORGANIZATION

CONSTRUCTION—SUBJECT SERIES

Table 2. Selected Statistics for Establishments With Payroll by Industry, Legal Form of Organization, and Type of Operation: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Item	Number of establishments [†]	All employees ^{**}	Payroll, all employees	Value of construction work	Cost of construction work sub-contracted to others	Net value of construction work [†]	Value added ^{††}	Relative standard error of estimate (percent) for column—		
	A	B	C	D	E	F	G	B	D	F
CONSTRUCTION INDUSTRIES (SIC 15, 16, 17)—Con.										
Special Trade Contractors (SIC 17)—Con.										
Plastering, drywall, acoustical and insulation work (SIC 1742)										
Legal form of organization and type of operation:										
All establishments	18 648	206 670	4 910 081	14 055 774	1 231 623	12 824 151	8 143 169	1	1	1
Corporations	10 841	173 246	4 368 935	12 150 703	1 045 301	11 105 402	7 079 231	1	1	1
Individual proprietorships	6 827	27 302	430 555	1 526 546	151 981	1 374 565	853 472	3	3	3
Partnerships	936	5 928	106 706	363 830	32 601	331 229	203 506	7	6	6
Other ²	44	(S)	3 883	14 694	1 739	12 954	(S)	(S)	12	13
Establishments of multiunit companies	433	22 270	635 644	1 837 656	125 560	1 712 096	1 075 992	(Z)	(Z)	(Z)
Establishments of single-unit companies	18 215	184 400	4 274 437	12 218 118	1 106 063	11 112 055	7 067 177	1	1	1
Terrazzo, tile, marble, and mosaic work (SIC 1743)										
Legal form of organization and type of operation:										
All establishments	6 499	34 012	774 788	2 438 641	116 078	2 322 563	1 358 017	2	2	1
Corporations	3 231	25 992	649 976	1 901 922	98 484	1 803 438	1 057 775	2	2	2
Individual proprietorships	3 022	7 059	108 375	466 523	16 147	450 376	258 233	4	4	4
Partnerships	229	892	15 042	66 441	1 375	65 067	39 708	14	14	14
Other ²	17	68	1 396	3 755	73	3 682	2 302	22	16	16
Establishments of multiunit companies	51	1 698	50 966	157 292	(S)	146 172	88 509	(Z)	(Z)	(Z)
Establishments of single-unit companies	6 448	32 313	723 822	2 281 349	104 958	2 176 391	1 269 508	2	2	2
Carpentry and floor work (SIC 175)										
Legal form of organization and type of operation:										
All establishments	48 406	226 549	4 553 994	17 279 799	1 912 884	15 366 915	8 925 471	1	1	1
Corporations	21 298	154 436	3 498 563	12 718 566	1 462 903	11 255 663	6 427 412	1	1	1
Individual proprietorships	24 551	63 023	912 331	3 936 883	402 785	3 534 098	2 159 933	2	2	2
Partnerships	2 388	8 487	133 672	586 181	45 224	540 957	319 299	5	5	5
Other ²	169	(S)	(S)	(S)	(S)	36 197	(S)	(S)	(S)	8
Establishments of multiunit companies	320	8 840	247 931	906 178	67 109	839 069	502 709	(Z)	(Z)	(Z)
Establishments of single-unit companies	48 086	217 709	4 306 063	16 373 621	1 845 775	14 527 846	8 422 762	1	1	1
Carpentry work (SIC 1751)										
Legal form of organization and type of operation:										
All establishments	38 210	177 601	3 488 844	12 852 280	1 517 816	11 334 464	6 759 711	1	1	1
Corporations	16 513	118 352	2 625 159	9 135 903	1 114 651	8 021 252	4 729 562	1	1	1
Individual proprietorships	19 591	51 917	752 421	3 233 452	364 177	2 869 275	1 762 209	2	2	2
Partnerships	1 951	6 813	104 031	(D)	37 184	(D)	251 572	6	(D)	(D)
Other ²	156	(S)	(S)	(D)	(S)	(D)	(S)	(S)	(D)	(D)
Establishments of multiunit companies	243	6 829	190 194	662 198	43 778	618 420	395 072	(Z)	(Z)	(Z)
Establishments of single-unit companies	37 967	170 772	3 298 650	12 190 082	1 474 038	10 716 044	6 364 639	1	1	1
Floor laying and other floor work, n.e.c. (SIC 1752)										
Legal form of organization and type of operation:										
All establishments	10 196	48 948	1 065 150	4 427 519	395 068	4 032 451	2 165 761	1	1	1
Corporations	4 786	36 084	873 403	3 582 663	348 252	3 234 411	1 697 850	2	2	2
Individual proprietorships	4 960	11 106	159 910	703 431	38 608	664 823	397 724	3	3	3
Partnerships	437	1 674	29 641	(D)	8 040	(D)	(S)	10	(D)	(D)
Other ²	13	84	2 195	(D)	168	(D)	2 459	3	(D)	(D)
Establishments of multiunit companies	77	2 012	57 737	243 980	23 331	220 649	107 637	(Z)	(Z)	(Z)
Establishments of single-unit companies	10 119	46 937	1 007 413	4 183 539	371 737	3 811 802	2 058 124	1	1	1
Roofing, siding, and sheet metal work (SIC 1761)										
Legal form of organization and type of operation:										
All establishments	27 569	215 545	4 622 510	16 787 979	1 198 147	15 589 833	8 905 974	1	1	1
Corporations	15 990	180 177	4 165 844	14 553 061	1 088 375	13 464 687	7 754 810	1	1	1
Individual proprietorships	10 328	30 524	386 449	1 890 822	96 322	1 794 500	976 802	3	3	3
Partnerships	1 080	4 482	63 770	318 158	12 219	305 939	158 916	8	9	9
Other ²	171	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Establishments of multiunit companies	384	13 741	389 012	1 377 022	114 732	1 262 290	796 118	(Z)	(Z)	(Z)
Establishments of single-unit companies	27 185	201 804	4 233 498	15 410 957	1 083 415	14 327 543	8 109 856	1	1	1
Concrete work (SIC 1771)										
Legal form of organization and type of operation:										
All establishments	26 123	192 539	4 038 030	14 422 908	1 243 479	13 179 429	7 703 117	1	1	1
Corporations	14 155	151 285	3 450 845	11 841 032	1 098 171	10 742 861	6 335 734	1	1	1
Individual proprietorships	10 600	35 166	491 302	2 151 207	117 852	2 033 354	1 141 753	2	3	3
Partnerships	1 272	5 745	91 483	414 019	26 495	387 524	216 201	7	7	7
Other ²	95	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Establishments of multiunit companies	236	8 105	227 967	901 825	92 164	809 661	523 931	(Z)	(Z)	(Z)
Establishments of single-unit companies	25 887	184 434	3 810 063	13 521 082	1 151 315	12 369 767	7 179 186	1	1	1

See footnotes at end of table.

CONSTRUCTION—SUBJECT SERIES

LEGAL FORM OF ORGANIZATION 11

Table 2. Selected Statistics for Establishments With Payroll by Industry, Legal Form of Organization, and Type of Operation: 1992—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Item	Number of establishments [†]	All employees ^{**}	Payroll, all employees	Value of construction work	Cost of construction work sub-contracted to others	Net value of construction work [†]	Value added ^{††}	Relative standard error of estimate (percent) for column—		
	A	B	C	D	E	F	G	B	D	F
CONSTRUCTION INDUSTRIES (SIC 15, 16, 17)—Con.										
Special Trade Contractors (SIC 17)—Con.										
Water well drilling (SIC 1781)										
Legal form of organization and type of operation:										
All establishments	3 638	19 346	443 641	1 727 355	51 357	1 675 998	994 814	2	2	2
Corporations	2 083	15 689	387 028	1 390 487	45 898	1 344 589	813 336	2	2	2
Individual proprietorships	1 347	3 022	45 280	263 943	4 221	259 723	140 453	6	6	6
Partnerships	202	617	11 029	71 348	1 239	70 109	40 029	14	13	13
Other ²	7	(S)	(S)	(S)	—	(S)	(S)	(S)	(S)	(S)
Establishments of multiunit companies	92	2 293	77 728	256 633	10 065	246 568	151 958	(Z)	(Z)	(Z)
Establishments of single-unit companies	3 546	17 053	365 913	1 470 722	41 292	1 429 430	842 856	2	2	2
Miscellaneous special trade contractors (SIC 179)										
Legal form of organization and type of operation:										
All establishments	52 405	467 272	11 297 109	35 883 460	3 248 102	32 635 358	22 324 412	(Z)	(Z)	(Z)
Corporations	35 553	415 974	10 444 590	32 323 586	2 997 451	29 326 134	20 136 033	(Z)	(Z)	(Z)
Individual proprietorships	14 547	40 174	611 858	2 636 717	183 677	2 453 040	1 623 212	2	2	2
Partnerships	1 908	7 915	163 671	629 179	41 749	587 430	401 047	5	5	5
Other ²	397	3 208	76 991	293 978	25 224	268 753	164 119	3	1	1
Establishments of multiunit companies	2 033	94 777	2 660 178	8 022 912	695 395	7 327 517	5 278 296	(Z)	(Z)	(Z)
Establishments of single-unit companies	50 372	372 495	8 636 932	27 860 548	2 552 707	25 307 841	17 046 116	1	1	1
Structural steel erection (SIC 1791)										
Legal form of organization and type of operation:										
All establishments	3 792	57 986	1 628 902	4 952 038	465 336	4 486 702	3 020 993	1	1	1
Corporations	3 018	54 184	1 565 602	4 717 188	452 951	4 264 238	2 895 152	1	1	1
Individual proprietorships	666	2 696	38 572	135 649	6 556	129 094	85 070	10	10	10
Partnerships	99	821	15 970	(D)	(D)	(D)	36 825	14	(D)	(D)
Other ²	8	285	8 758	(D)	(D)	(D)	3 945	15	(D)	(D)
Establishments of multiunit companies	176	9 516	325 936	1 059 631	85 230	974 401	668 108	(Z)	(Z)	(Z)
Establishments of single-unit companies	3 616	48 470	1 302 966	3 892 407	380 106	3 512 301	2 352 885	1	1	1
Glass and glazing work (SIC 1793)										
Legal form of organization and type of operation:										
All establishments	4 590	32 067	795 946	2 724 467	90 382	2 634 085	1 423 934	1	1	1
Corporations	3 392	28 819	739 288	2 462 838	88 080	2 374 758	1 287 565	1	1	1
Individual proprietorships	1 005	2 679	45 017	206 605	1 747	204 859	108 234	6	6	6
Partnerships	170	507	10 200	(D)	(D)	(D)	25 513	17	(D)	(D)
Other ²	23	62	1 441	(D)	(D)	(D)	2 622	20	(D)	(D)
Establishments of multiunit companies	137	2 507	67 541	235 984	14 421	221 563	124 610	(Z)	(Z)	(Z)
Establishments of single-unit companies	4 453	29 561	728 405	2 488 483	75 961	2 412 522	1 299 324	1	1	1
Excavation work (SIC 1794)										
Legal form of organization and type of operation:										
All establishments	13 898	77 126	1 816 814	6 869 692	740 514	6 129 178	4 339 605	1	1	1
Corporations	8 062	61 530	1 552 980	5 590 129	639 288	4 950 841	3 492 435	1	1	1
Individual proprietorships	5 361	13 770	226 211	1 086 869	81 081	1 005 787	728 381	4	4	4
Partnerships	430	1 611	33 426	176 532	17 606	158 927	109 792	9	9	10
Other ²	46	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Establishments of multiunit companies	108	3 403	121 167	465 863	75 528	390 335	265 024	(Z)	(Z)	(Z)
Establishments of single-unit companies	13 790	73 723	1 695 647	6 403 829	664 986	5 738 843	4 074 581	1	1	1
Wrecking and demolition work (SIC 1795)										
Legal form of organization and type of operation:										
All establishments	966	13 112	296 028	1 059 133	131 147	927 986	775 026	2	2	2
Corporations	745	12 326	282 215	993 969	122 310	871 659	730 849	2	2	2
Individual proprietorships	189	599	10 263	52 479	8 047	44 432	34 866	8	17	15
Partnerships	28	161	3 094	(D)	(D)	(D)	8 077	25	(D)	(D)
Other ²	4	26	455	(D)	(D)	(D)	1 235	(Z)	(D)	(D)
Establishments of multiunit companies	44	2 741	66 020	226 464	23 589	202 875	170 338	(Z)	(Z)	(Z)
Establishments of single-unit companies	922	10 371	230 008	832 669	107 558	725 111	604 688	2	3	2
Installation or erection of building equipment, n.e.c. (SIC 1796)										
Legal form of organization and type of operation:										
All establishments	3 889	82 648	2 324 139	6 611 040	478 909	6 132 131	4 494 378	1	(Z)	(Z)
Corporations	3 267	79 612	2 262 336	6 424 562	468 383	5 956 179	4 375 240	(Z)	(Z)	(Z)
Individual proprietorships	541	1 926	37 080	121 425	4 722	116 703	82 694	8	8	8
Partnerships	60	438	9 381	24 760	1 226	23 533	15 394	11	11	12
Other ²	21	672	15 342	40 293	4 578	35 715	21 051	(Z)	(Z)	(Z)
Establishments of multiunit companies	871	45 836	1 242 553	3 671 649	256 164	3 415 485	2 447 467	(Z)	(Z)	(Z)
Establishments of single-unit companies	3 018	36 812	1 081 586	2 939 391	222 745	2 716 646	2 046 911	1	1	1

See footnotes at end of table.

12 LEGAL FORM OF ORGANIZATION

CONSTRUCTION—SUBJECT SERIES

Table 2. **Selected Statistics for Establishments With Payroll by Industry, Legal Form of Organization, and Type of Operation: 1992—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Item	Number of establish- ments ¹	All em- ployees**	Payroll, all employees	Value of construction work	Cost of construction work sub- contracted to others	Net value of construction work†	Value added††	Relative standard error of estimate (percent) for column—		
	A	B	C	D	E	F	G	B	D	F
CONSTRUCTION INDUSTRIES (SIC 15, 16, 17)—Con.										
Special Trade Contractors (SIC 17)—Con.										
Special trade contractors, n.e.c. (SIC 1799)										
Legal form of organization and type of operation:										
All establishments	25 270	204 333	4 435 282	13 667 090	1 341 813	12 325 277	8 270 475	1	1	1
Corporations	17 069	179 503	4 042 168	12 134 899	1 226 441	10 908 459	7 354 791	1	1	1
Individual proprietorships	6 784	18 505	254 715	1 033 690	81 524	952 166	583 968	4	4	4
Partnerships	1 122	4 377	91 600	309 160	16 317	292 843	205 446	7	7	7
Other ²	296	1 948	46 798	189 340	17 530	171 809	126 269	4	1	1
Establishments of multiunit companies	697	30 775	836 961	2 363 321	240 463	2 122 858	1 602 749	(Z)	(Z)	(Z)
Establishments of single-unit companies	24 573	173 559	3 598 321	11 303 768	1 101 350	10 202 419	6 667 726	1	1	1

¹Number of establishments in this table represent those in business at any time during the year.

²Includes establishments with other noncorporate forms of organization plus establishments for which information available did not permit classification by legal form of organization.

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations, or reconstruction.** Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. **Maintenance and repair.** Includes incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, and cleaning and janitorial services.

Number of establishments in business during year. Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners. These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees. Comprises all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers. Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers,

and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees. Includes employees in executive, purchasing, accounting, personnel, professional, and technical activities, as well as routine office functions. Also included are supervisory employees above the working foreman level.

Payroll. Includes the gross earnings paid in the calendar year 1992 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

Fringe benefits. Represents expenditures made by the employer during 1992 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions. Includes Social Security contributions, unemployment compensation, worker's compensation, and State temporary disability payments.

Voluntary payments. Includes life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done. Includes all value of construction work done during 1992 for construction work performed by general contractors and special trades contractors. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Speculative builders were instructed to include the value of buildings and other structures built or being built for sale in 1992 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Other business receipts. Includes business receipts not reported as value of construction work done. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work. Derived for each establishment by subtracting the costs for construction work subcontracted out to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added. Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted out to others, and costs for materials, components, supplies, and fuels. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs. Represents the costs for materials, components, and supplies; costs for construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1992 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)

- freight and other direct charges representing only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, as well as costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment such as printing presses and computer systems, which are not an integral part of a structure.
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted out to others include:

- all costs during 1992 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- the costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. Such costs are reported under, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal, and coke products.

Rental costs for machinery, equipment, and buildings. Includes all costs during 1992 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services. Includes all costs during 1992 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies or from other establishments of the same company. It includes only the cost of

repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property or the cost of adapting it for another use. Such costs are included in "capital expenditures."

Assets and depreciation. Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices and shops); stationary machinery (generators and shop equipment); mobile machinery (tractors and trucks); and other equipment (office furniture and fixtures). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, and destroyed during 1992.

Capital expenditures. Refers to all costs actually incurred during 1992 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1992.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects. Shows the distribution of the value of construction work done by ownership of the project; that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal and State and local governments.

Value of construction work subcontracted in from others. Includes the value of construction work during 1992 for work done by reporting establishments as subcontractors. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction. Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1992. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached.** Includes all residential buildings constructed for one family use.
- **Single-family houses, attached, including townhouses and townhouse-type condominiums.** Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives.** Includes high-rise, low-rise, or any structures containing two or more housing units other than attached single-family houses.
- **Hotels, motels, and tourist cabins.** Includes hotels, motels, bed and breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- **Other residential buildings.** Includes dormitories, fraternity and sorority houses, and other nonhousekeeping residential structures.
- **Office buildings.** Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.

- **Other commercial buildings, such as stores, restaurants, and automobile service stations.** Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
 - **Industrial buildings.** Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
 - **Warehouses.** Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
 - **Religious buildings.** Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
 - **Educational buildings.** Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
 - **Hospitals and institutional buildings.** Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
 - **Farm buildings, nonresidential.** Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
 - **Amusement, social, and recreational buildings.** Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
 - **Other nonresidential buildings.** Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.
- Nonbuilding construction:**
- **Highways, streets, and related work such as installation of guardrails, highway signs, and lighting.** Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
 - **Outdoor swimming pools.** Includes wading pools and reflecting pools.
 - **Airport runways and related work.** Includes runways, taxiways, aprons, and related work.
 - **Private driveways and parking areas.** Includes all nonstructural parking areas and private driveways of all surface types.
 - **Fencing.** Includes all types of fencing.
 - **Recreational facilities.** Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
 - **Tunnels.** Includes highway, pedestrian, railroad, and water distribution tunnels.
 - **Bridges and elevated highways.** Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
 - **Dam and reservoir construction.** Includes hydroelectric, water supply, and flood control dams and reservoirs.
 - **Marine construction.** Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
 - **Harbor and port facilities.** Includes docks, piers, and wharves.
 - **Conservation and development construction.** Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
 - **Power and communication transmission lines, towers, and related facilities.** Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
 - **Sewers, sewerlines, septic tanks, and related facilities.** Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
 - **Water mains and related facilities.** Includes water supply systems, pumping stations, and related facilities.
 - **Pipeline construction other than sewer or waterlines.** Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
 - **Urban mass transit.** Includes subways, trolleys, street cars, and light rail systems.
 - **Railroad construction.** Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
 - **Blast furnaces, petroleum refineries, chemical complexes, etc.** Includes coke ovens and mining appurtenances such as tipplers and washeries.

- **Power plants, nuclear.** Includes atomic energy plants and nuclear reactors.
- **Power plants, and cogeneration plants, except nuclear.** Includes electric and steam generating plants and cogenerating plants.
- **Sewage treatment plants.** Includes sewage treatment and waste disposal plants.
- **Water treatment plants.** Includes water filtration and water softening plants.
- **Ships.** Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- **Other nonbuilding construction.** Includes all types of nonbuilding construction not included elsewhere.

Appendix B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified

Appendix C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)

Data products in the census of construction industries are issued in four publication series and in three media:

Printed reports	[P]
CD-ROM	[C]
Highlights online	[+]

Preliminary Industry Series (CC92-I-1(P) to -27(P))

(Available July 1994 through January 1995) [P] [C]

Twenty-six separate industry reports and a U.S. summary report, providing national statistics for establishments with payroll. Statistics shown for 1992 include:

- Number of establishments
- Number of employees
- Payroll
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC92-I-1 to -27)

(Available April 1995 through August 1995) [P] [C] [+]

Twenty-six separate industry reports and a U.S. summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC92-A-1 to -10)

(Available August 1995 through December 1995) [P] [C] [+]

Nine reports on the construction industries, representing each census geographic division, and a U.S. summary report. Regional reports provide detailed data for States and metropolitan areas.

Subject Report—Legal Form of Organization and Type of Operation (CC92-S-1)

(Available August 1995) [P] [C]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUS REPORTS

The census of construction industries is part of the 1992 Economic Census. The economic census is conducted at 5-year intervals in years ending in 2 and 7 and consists of eight separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the census of outlying areas, including separate economic census of Puerto Rico and other outlying areas. The census of agriculture and census of governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300. If you have any questions, call Census Customer Services 1-301-457-4100.